BITUMINOUS SURFACE TREATMENTS, CRACK SEALING, HOT IN-PLACE ASPHALT RECYCLING

NAUGATUCK, CONNECTICUT

Contract No. 16-24

CONTRACT DOCUMENTS

PREPARED BY THE BOROUGH OF NAUGATUCK CONNECTICUT

August 2016



INVITATION TO BID

Borough of Naugatuck

Sealed bids will be received by the Purchasing Agent, Town Hall, 229 Church Street, Naugatuck, CT 06770 on or before Monday, August 22, 2016 at 11:00 A.M. for supplying the Borough of Naugatuck with the following projects:

Contract No. 16-24; Bituminous Surface Treatments, Crack Sealing, Hot In-Place Asphalt Recycling

The Contract Documents may be examined at the Office of the Purchasing Agent, Town Hall, 229 Church Street, Naugatuck, CT 06770.

Copies of the specifications may be obtained at the Office of the Purchasing Agent upon submission of a non-refundable plan deposit in the form of a check or money order payable to the Borough of Naugatuck in the amount of \$50.00 per set. Specifications can also be obtained at no cost from the Borough of Naugatuck web site http://www.naugatuck-ct.gov All firms obtaining plans and specifications must submit contact information by e-mail to whozer@naugatuck-ct.gov Contact information must be submitted three days in advance of the bid opening to be considered.

Addenda if required shall be posted on the http://www.naugatuck-ct.gov web site. It is the bidder's responsibility to check the Town web site in advance of the bid opening to determine if any addenda have been issued.

The Borough of Naugatuck reserves the right to waive any informalities or to reject any or all bids.

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

SPECIFICATIONS

STANDARD SPECIFICATIONS

The material and construction methods for the work specified in this contract shall conform with the applicable provisions of the State of Connecticut, Department of Transportation specifications entitled "STANDARD SPECIFICATIONS FOR ROADS, BRIDGES AND INCIDENTAL CONSTRUCTION", Form 816, 2004, as revised by the Supplemental Specifications to date (otherwise referred to collectively as "ConnDOT form 816") unless modified by the Special Provisions contained herein. "ConnDOT form 816" is hereby made part of this contract. Form 816 may be purchased from:

Connecticut Department of Transportation Manager of Contracts 2800 Berlin Turnpike, Newington, Connecticut 06111

All references to Commissioner, Department, Engineer, and State anywhere within the Form 816 shall be interpreted to mean the Borough of Naugatuck or a duly authorized agent of the Borough. Any questions or ambiguity regarding any definitions shall be brought to the immediate attention of the Borough.

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SECTION A INFORMATION FOR BIDDERS

SECTION A

INFORMATION FOR BIDDERS

Borough of Naugatuck

Contract No. 16-24; Bituminous Surface Treatments, Crack Sealing, Hot In-Place Asphalt Recycling

1. Proposals Received

Sealed proposals for the Bituminous Surface Treatments, Crack Sealing, Hot In-Place Asphalt Recycling will be received by the Purchasing Office, Borough of Naugatuck, 229 Church Street, Naugatuck, CT 06770 until Monday, August 22, 2016 at 11:00 A.M. local time. Immediately following the bids will be publicly opened and read aloud.

2. Location and Description of Work

These specifications will provide a basis for the furnishing of all materials, equipment, labor, transportation, testing and other goods and services necessary to complete the following items:

Crack Sealing
Micro-Surfacing
Quick Set Slurry Seal
Chip Seal
Hot In-Place Asphalt Recycling

3. None

4. Plans and Specifications

Copies of the Specifications may be seen and obtained at the Purchasing Office, Borough of Naugatuck, 229 Church Street, Naugatuck, CT 06770

Treatments, Crack Sealing, Hot In-Place Asphalt Recycling, will be entered into by the successful bidder and the Borough of Naugatuck. The State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816, 2004 along with supplemental specifications contained herein will detail the general requirements for materials, methods of installation, measurement and basis of payment to be required in this project. Any references to the State of Connecticut, the Department, the commissioner, Engineer, or other terms indicating the State of Connecticut and her agents as party to the contract shall for this project mean the Borough of Naugatuck and her designated agents or employees.

Where insurance is required to be carried in the name of the State of Connecticut and the State of Connecticut is to be held harmless, this shall be done in the name of the Borough of Naugatuck and the Borough of Naugatuck shall be held harmless.

All requirements for material testing, certificates of the compliance, or material certifications shall be done as if this were a contract being entered into with the State of Connecticut.

It is the intent of this contract to maintain all standard requirements of Form 816 without attempting to redefine every term within the 816 to the "Borough of Naugatuck".

The bidder shall, therefore, be aware that the Borough of Naugatuck and her agents shall inspect and administrate this contract, make contract interpretations, determine the acceptability of the work and approve requests for payments. The Contractor shall be responsible for the requirements stated in Form 816 and in the construction drawings.

5. Addenda and Interpretations

No interpretations of the meaning of the Specifications, or other pre-bid documents will be made to any Bidder orally.

Every request for such interpretation shall be in writing, addressed to Mr. James Stewart, P.E., Borough of Naugatuck, Department of Public Works Office, 246 Rubber Ave. Naugatuck, CT 06770. To be given consideration, such requests must be received at least six (6) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the specifications, which, if issued, will be mailed by certified mail with return receipt requested to all prospective Bidders, at the respective address furnished for such purposes, not later than four (4) 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 such Bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

6. Familiarity of the Work

Each Bidder shall fully inform himself prior to bidding as to existing conditions and limitations under which the work is to be performed, and shall include in his bid a sum to cover the cost of items necessary to perform the work as set forth in the Contract Documents. No allowance will be made to a Bidder because of lack of such examination or knowledge. The submission of a bid will be considered as conclusive evidence that the Bidder has made such examination.

The Owner assumes no responsibility whatsoever with respect to ascertaining for the Contractor such facts concerning physical characteristics at the site of the project.

The Contractor 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 concessions, because of any interpretations or misunderstanding on his part of this Contract, or because of any failure on his part to fully acquaint himself with all conditions relating to the work.

7. None

8. Estimate of Work

For bidding purposes, the work has been subdivided into unit price items. The quantities shown below are to be considered as approximate only. The Inspector does not expressly or by implication agree that the actual quantity(ies) will correspond therewith, but reserves the right to increase or decrease the amount of

any Item or portion of the work as may be deemed necessary.

9. Qualification of Bidders

A Bidder shall be a contractor who is experienced in the construction of the projects of this type. The proposal shall contain adequate proof of the qualifications of the Bidder to perform, in a satisfactory manner and within the time specified, all the work covered by the Plans and Specifications. This proof shall be fully recorded on the pages titled "References", which shall become part of the Proposal.

10. 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 or work contemplated.

11. Preparation of Proposals

The Proposal must be made upon the forms contained herein. The blank spaces in the Proposals must be filled in correctly where indicated. The Bidder must state, both in words and in numerals, written or printed in ink, the prices for which he proposes to do each Item of the work contemplated. In case of discrepancy between the words and the numerals, 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 an individual makes the Proposal, his name and post office address 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 of the firm, partnership, or corporation.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the Bidder, this 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: Purchasing Office, Borough of Naugatuck, City Hall, 229 Church Street,

Naugatuck, CT 06770.

12. Irregular Proposals

The Borough of Naugatuck reserves the right to reject any proposals if they show any omission, alteration of form, additions not called for, conditional bids, or irregularities of any kind.

13. Proposal Guarantee

No proposal will be considered unless accompanied by a certified check in U.S. dollars, or bid bond using an insurance company licensed to do business in the State of Connecticut in an amount equal to at least Five thousand dollars payable to the order of the Borough of Naugatuck, said check or bid bond to be returned to the Bidder unless forfeited as hereinafter stipulated. Such checks or bid bonds

will be returned to all bidders within five (5) days after the execution of the Contract and the furnishing of the required security by the successful Bidder.

14. Withdrawal of Proposals

If a Bidder wishes to withdraw his Proposal, he may do so before the time fixed for the opening of bids by communicating his purpose to the office of the Mayor. Upon such notice, the Proposal will be handed to him unopened.

15. Execution of Contract

The party to whom the Contract is awarded, or his authorized representative, will be required to attend at the office of the Mayor, Borough of Naugatuck, with the sureties offered by him, or them, and a current certificate of Corporate good standing issued by the Office of the Secretary of State in which the corporation is incorporated, and execute the Contract within five (5) days from the date of the award. If the party entering into this contract is a corporation, a Corporate Resolution duly executed by the president and Secretary of the Corporation authorizing the Corporation to enter into this Contract shall be provided. In case of his failure or neglect to do so, the Owner may, at its opinion, determine that the Bidder has abandoned the Contract and thereupon the Proposal and acceptance shall be null and void, and bid security accompanying the Proposal shall be forfeited as liquidated damages to the Owner. If the party entering into this contract is a partnership, a partnership resolution duly executed by a majority of the general partners authorizing the partnership to enter into this contract shall be provided.

16. Bonds

The successful Bidder, at the time of the execution of the Contract, shall furnish a Performance Bond in an amount at least equal to one hundred percent (100%) of the Contract prices as security for the faithful performance of this Contract and also a Payment bond in an amount not less than one hundred percent (100%) for the Contract prices as security for the payment of all persons performing labor on the project under this Contract and furnishing materials in connection with this Contract. All Bonds shall be in the forms prescribed by Law or Regulation and be acceptable to the Owner. Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Connecticut. Bidder shall provide evidence that Surety Company is licensed to conduct business in the State of Connecticut. All sureties shall be in full force throughout the guarantee period and until the retainage is released.

17. None

18. Responsibility of the Contractor

Attention is hereby particularly directed to the provisions of the Contract and Specifications whereby the Contractor shall be responsible for any loss or damage that may happen in the work, or any part thereof, during its progress and also whereby the Contractor shall make good any defects for faults that may occur within one (1) year after date of final estimate. He shall indemnify and save harmless the Owner and Engineer from any damages or costs to which they may be put by reason of injury to the person or property of another resulting from negligence or carelessness in the performance of the work under this Contract.

19. Insurance

Before execution of the Contract, the Bidder will be required to file with the Borough of Naugatuck a certificate of insurance. The certificate, executed by an insurance company satisfactory to the Borough of Naugatuck shall name the Borough of Naugatuck and the State as additional insured parties on the form furnished with these specifications. The "Certificate of Insurance" shall state that at a minimum, with respect to the contract, the bidder carries insurance in accordance with the requirements and stipulations listed below.

Unless requested otherwise by the Borough of Naugatuck, the Bidder and its insurer shall not assert the defense of governmental immunity in the adjustment of claims or in the defense of any claim or suit brought against the Borough of Naugatuck and the State. The Bidder shall assume and pay all cost and billing for premiums and audit charges earned and payable under the required insurance.

- A. Workmen's Compensation Insurance: With respect to all operations the Bidder performs and all those performed for it by subcontractors, the Bidder shall carry workmen's compensation insurance in accordance with the requirements and the laws of the State.
- B. Contractor's Public Liability and Property Damage Insurance: With respect to the Project operations the Bidder performs and also those performed for it by subcontractors, the Bidder shall carry regular Contractor's Public Liability Insurance. The insurance shall provide coverage for each accident or occurrence in the amount of \$1,000,000 for all damages resulting from (1) bodily injury to, or death of, persons and/or (2) injury to or destruction of property. Subject to that limit per accident or occurrence, the policy shall provide a total or aggregate coverage of \$2,000,000 for all damages during the policy period.
- C. Automobile Liability Insurance: The operation of all motor vehicles, including those hired or borrowed, used in connection with the project, shall be covered by Automobile Liability Insurance. The insurance shall provide coverage for each accident or occurrence in the amount of \$500,000 for all damages resulting from (1) bodily injury to, or death of, persons and/or (2) injury to or destruction of property. If an insurance policy shows an aggregate limit as part of the automobile liability coverage, the aggregate limit must be at least \$1,000.000.
- D. With respect to the project operations the Bidder performs and also those performed for it by subcontractors, the Bidder shall carry for and on behalf of the Borough of Naugatuck, and State, insurance which shall provide coverage for each accident or occurrence in the amount of \$1,000,000 for all damages resulting from (1) bodily injury to or death of person and/or (2) injury to or destruction of property. Subject to that limit per accident or occurrence, the policy shall provide a total or aggregate coverage of \$2,000,000 for all damages during the policy period.
- E. None
- F. None
- G. Termination or change of Insurance: Each insurance policy shall be endorsed to provide that the insurance company shall notify the Borough of Naugatuck by certified mail at least thirty (30) days in advance of termination, or any change in the policy. No such change shall be made without prior written approval of the appropriate Official.
- H. Claims: Each insurance policy shall state that the insurance company shall agree to investigate and defend the Borough of Naugatuck and State against all damages, even if groundless.

I. Compensation: There shall be no direct compensation allowed the Bidder on account of any premium or other change necessary to take out and keep in effect all insurance or bonds, but the cost thereof shall be considered included in the general cost of the work.

20. Care and Protection of Property

The Contractor shall take particular care to avoid damages to all private property and to private improvements within the Boroughs' right of way. He shall make good any damages to the satisfaction of the Inspector. There shall be no additional compensation for the repair or restoration of private property, or private improvements. within the Boroughs' right of way.

21. 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 Owner will furnish the successful Bidder a sales tax exemption number.

22. Compliance with Federal and State Regulations

The Contractor shall be responsible for full compliance with any Federal and/or State

laws, regulations and standards, as applicable to any project fully or partially funded by State and/or Federal funding agency. This project is funded, in part, by the State and Federal government.

23. Permits

All licenses and permits for complying with any applicable Federal, State, and Municipal laws, codes and regulations in connection with the prosecution of the work shall be obtained by the Contractor, at no additional cost to the Owner.

24. None

25. Contractor's Right to Terminate Work

If the work should be stopped under an order of any court or other public authority, for a consecutive period of not less than thirty (30) days, through no act or fault of the Contractor or of anyone employed by him, then the Contractor may terminate this Contract and recover from the Owner payment for all work executed.

26. None

27. 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.

28. Right to Reject

The Owner reserves the right to reject any or all proposals or to accept any bid, should it deem it to be in the best interest of the Owner

SECTION B PROPOSAL

SECTION B

PROPOSAL

The undersigned, as Bidder, 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, the proposed Form of Contract, and the Contract Drawings therein referred to; that no person or persons acting in any official capacity for the Owner 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 execute the Form of Contract with the Owner; to provide all necessary equipment, tools, and other means of construction, and to do all work and furnish all materials specified in the Contract, in the manner and time therein prescribed, and according to the requirements of the Borough of Naugatuck Inspector as therein set forth, and that he will take in full payment therefore, the following unit prices and lump sums, to wit:

The Bluder acknowledges receipt of	of the following addenda:
Addendum No	Dated:
Addendum No	Dated:

The Didden colonoryledges receipt of the following addender

The undersigned agrees that he shall execute the Contract within the ten (10) days after the date of award, and shall commence work within the ten (10) days after date of the Notice to Proceed and shall progress therewith to its entire completion within the time stipulated in the Contract.

The Bidder agrees that this bid shall be good and may not be withdrawn for a period of ninety (90) days after the scheduled closing time for receiving bids.

If this Proposal shall be accepted by the Owner and the undersigned shall fail to contract as aforesaid, and to give bonds in a sum equal to one hundred percent (100%) of the Contract price, as determined by the canvass of bids, and with surety or sureties satisfactory to the Owner within ten (10) days from the date of the award, then the Owner may, at its option, determine that the Bidder has abandoned the Contract: thereupon, the Proposal and acceptance shall be null and void, and the bid security, for not less than five percent (5%) of the amount of the bid, accompanying this Proposal, shall become the property of the said Owner as liquidated damages for the delay and additional expense to the Owner caused thereby if said Proposal shall be rejected, or if said Proposal shall be accepted and the Bidder shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Proposal) and shall furnish a Bond for his faithful performance of said Contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Proposal, the accompanying bid security shall be returned to the undersigned making bid.

The undersigned is aware that the Borough of Naugatuck may reject any and all bids in whole or in part; that the Borough may waive technical defects, irregularities and omissions; that the award will be based on the combination of items that will best serve the interest of the Borough; that the bid price does not include any taxes for which the

Borough is not liable; and that acceptance of the bid will establish no exclusive contract by which the Borough of Naugatuck will be required to purchase from the undersigned.

The undersigned claims without reservation that his/her bid is made without collusion with any other person, individual or corporation.

Bid Item quantities for unit price bid items are not guaranteed. Final payment will be based on actual installed quantities. Items not specifically identified for payment in the Bid Form shall be assumed to be included in the work effort of other bid items and shall not be paid or requested for payment separately.

RANDOM CRACK SEALING BID CALCULATION

Bidders shall submit Bids for both Price per pound and provide Bids per street location. Payment will be made using the Price per pound for areas not covered by the attached table.

Polyester reinforced Asphalt Crack Sealing - Installed per specification

Item	Quantity	Bid Price per Pound
Polyester reinforced Asphalt	< 2,500 Pounds/Day	\$
Crack Sealing - Installed per specification	> 2,500 Pounds/Day	\$

Alternate #1 Modified A/C Crack Seal with Fiber Compound Installed per specification

Item	Quantity	Bid Price per Pound
Modified A/C Crack Seal	< 2,500 Pounds/Day	\$
with Fiber Compound - Installed per specification	> 2,500 Pounds/Day	\$

Alternate #2 Connecticut DOT Approved Rubberized Asphalt

The Borough of Naugatuck shall require the contractor to submit shop drawings and specifications to be approved prior to starting work.

Item	Quantity	Bid Price per Pound
Connecticut DOT Approved	< 2,500 Pounds/Day	\$
Rubberized Asphalt	> 2,500 Pounds/Day	\$

Asphalt price adjustment per exhibit #6 shall be applied only at submission of invoice. Base average terminal price is \$450.00 per ton. There shall be no adjustment for the work on the attached street table bid.

Borough of Naugatuck Random Crack Sealing - Street Bid Sheet Contract 16-24

					Ī	Rubberi	zed Asphalt	Polyester Re	inforced Asphalt	Modified A/C W	/ Fiber Compound
Street	From	То	Feet	Width	SY	\$ /SY	Bid \$	\$ /SY	Bid \$	\$ /SY	Bid \$
Mulberry Street	May Street	Hopkins Hill	2,643	22	6,461						
Evelin Drive	Shaduck Road	End	1,454	24	3,877						
Dunican Ave	Shaduck Road	Dewberry	532	26	1,537						
Krodel Road	Web Road	Dunican Ave	1,887	21	4,403						
Web Road	Krodel Road	Westover	805	24	2,147						
Millville Ave	Field Street	Terrace Ave.	6,361	28	19,790						
Osborn	New Haven Road	End	3,900	27	11,700						
Hazel Ave	New Haven Road	Marjorie St	653	23	1,669						
Laurel Ave	New Haven Road	Marjorie St	754	25	2,094						
Marjorie	Hazel Ave	End	558	24	1,488						
General Dalton Dr	Marjorie St	End	760	26	2,196						
General Patton Dr.	Marjorie St	End	1,641	26	4,741						
Glendale Ct	General Patton Dr.	End	688	28	2,140						
Total			22,636		64,243						

RANDOM CRACK SEALING BID CALCULATION- CONTINUED

Company Name	 Corporate Seal
Address	
Telephone	
Signature:	
Print Name:	
Title:	

QUICK SET SLURRY & MICROSURFACING BID CALCULATION

The following quantities are for determining the lowest qualified bidder, but may not reflect actual quantities due to availability of funding. The total bid prices will be calculated by adding the sum of the following quantities, multiplied by the unit bid prices. Asphalt price adjustment per exhibit #4 shall be applied only at submission of invoice. Base average terminal price for Liquid Binder PG64-22 FOB is \$315 per ton for purpose of bid.

The Town has the right to increase, decrease or eliminate any quantities.

Item #	Item	Quantity	Unit Price	Total
#				
1	Type II Micro-surfacing	500 Tons	\$ Ton	\$
2	Type III Micro-surfacing	50 ton	\$ Ton	\$
3	Tack Coat, in Place	1,000		\$
3	Tack Coat, III Trace	gallons	\$ Gallon	
4	Glasgrid Pavement Reinforcement	200 SY	\$ SY	\$

Company Name	 Corporate Seal	
Address		
Telephone		
Signature:	 	
Print Name:	 	
Title:	 	
Tax Identification Number:		

HOT IN-PLACE ASPHALT RECYCLING BID CALCULATION

The following quantities are for determining the lowest qualified bidder, but may not reflect actual quantities due to availability of funding. The total bid prices will be calculated by adding the sum of the following quantities, multiplied by the unit bid prices.

The Town has the right to increase, decrease or eliminate any quantities.

Item	Item	Quantity	Unit Price	Total
#				
1	HOT IN-PLACE ASPHALT RECYCLING	10,000	\$ SY	\$

Company Name		Corporate Seal
Address		
Email		
Telephone	Fax No	
Signature:		
Print Name:		
Title:		
Tax Identification Number:		

SECTION C REFERENCES/QUALIFICATIONS

SECTION C

REFERENCES/QUALIFICATIONS

The Bidder is required to fill out the following form to enable the Owner to make inquiries and judge as to the Bidder's experience, skill, available financial resources, credit, and business standing.

1.	Number of years the bidder has been in business as a General Contractor:
2.	Has the Bidder ever failed complete work awarded; and if so, state where and why:
3.	Does the Bidder plan to sublet any part of this work; and if so, give details:
4.	List equipment Bidder owns that is available for this project:
5.	List equipment the Bidder plans to rent or purchase for this project:
<u></u>	ajor Material Supplier:
	Bidder

CONTRACTOR'S QUALIFICATION SUMMARY

The bidder is required to submit this summary with his bid in order that the Borough of Naugatuck may properly evaluate the qualifications of the Contractor. Failure to submit this summary in proper form will be cause of rejection of the bid. The Contractor is required to have successfully completed five projects in the last three years with an aggregate total of 500,000 square yards or 7,500 tons of material.

List projects below:

Owner's Name	Year Completed	Project Number	S.Y. or Tons	Person to Contact Name/Telephone

VENDOR NAME:		

CONTRACTOR'S QUALIFICATION SUMMARY Random Crack Sealing

The bidder is required to submit this summary with his bid in order that the Borough of Naugatuck may properly evaluate the qualifications of the Contractor. Failure to submit this summary in proper form will be cause of rejection of the bid. The Contractor is required to have successfully completed, with the specified material, six projects within the last three years totaling a minimum 500,000 pounds.

Owners Name	Year Com- pleted	Project Number	Quantity Applied	Person to Contact Name/Telephone

Vendor	Name:		
, ciidoi	T TOTALLO	 	

SECTION D

BID BOND /SURETY GUARANTY

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned:

as Principal and	as Surety are	re held and firmly bound unto Rorough	h of	
as Principal, andas Surety are held and firmly bound unto Borough of Naugatuck hereinafter called the "Owner", in the penal sum of				
_	_	nited States, for the payment of which		
	•	s, executors, administrators, successors		
and assigns, jointly and sever			-,	
THE CONDITIONS OF THI	S ORI IGATION IS SUCI	CH, that whereas the Principal has		
		, 20, for		
submitted the accompanying	DID, dated	, 20, 101		
NOW THEREFORE, if the P		aw said Bid within the time period		
	-	nin any extended time period agreed to	hv hv	
-	•	ecified, within ninety (90) days after the	•	
•		reof, or if no period be specified, withi		
		ted to him for signature, enter into a wi		
	_	s accepted, and give bond with good a		
		e faithful performance and proper	110	
•	• •	shall be null and void and of no effec	rt	
otherwise to remain in full fo	•	shari be half and void and of no effec	τ,	
odici wise to remain in run 10	ice of virtue.			
Failure to comply with the af	orementioned condition sh	shall result in the forfeiture of this BID)	
BOND as liquidated damages				
, ,				
IN WITNESS WHEREOF, th	ne above-bounded parties !	have executed this Instrument under t	their	
several seals thisday	y of	, 20, the name and		
		ixed and these presents signed by its		
undersigned representative, p	ursuant to authority of its	governing body.		
No extension of time or other	modification of the BID	BOND shall be valid unless agreed to	in	
writing by the parties to this I	Bond.			

BID BOND

(Page 2 of 2)

In presence of:			
		(Individual Principal)
	_	(Business Address)	
		(Individual Principal)
Attest:	_	(Business Address)	
		(Corporate Principal	l)
	_	(Business Address)	
	Ву: _		Affix _Corporate
Attest:			Seal
		(Corporate Surety)	
	_	(Business Address)	
	Ву: _		Affix _Corporate
Countersigned			Seal
By:			
* Attorney-in Fact, State of			

^{*} Power-of Attorney for person signing for Surety Company must be attached to Bond.

SURETY GUARANTY FORM

(To accompany Proposal)

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
a
(Name of Surety Company)
corporation organized and existing under the laws of the State of and
licensed to do business in the State of Connecticut, certifies and agrees, that if the Contract for
the Traffic Signal Installation at Rubber Ave and Andrew Ave 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 therewith.
(Surety)
(To be accompanied by the usual proof of authority of officers of Surety Company to execute the
same.)

SECTION E

CONTRACT AGREEMENT AND CERTIFICATE AS TO CORPORATE PRINCIPAL

CONTRACT AND AGREEMENT

THIS AGREEMENT, made this	day of	in the year 201,			
Between the Borough of Naugatuck, with its principal office and place of business at 229					
Church Street, Connecticut 06770, acting he	erein through it's Mayor an	d			
, a		, with an office and			
place of business at	, herein	after called the contractor.			
WITNESSETH: That the parties to this promises, and agreements on the part of the and agree as follows:					
I <u>Definitions</u>					
The word "Owner" as used herein shits properly authorized representatives.	nall mean the Borough of N	Naugatuck, acting through			
The words "as directed", "as required", "as permitted", "as allowed", or phrases of like effect or import, used herein shall mean that the direction, requirement, permission, or allowance of the Borough of Naugatuck Inspector is intended and similarly the words "approved", "reasonable", "suitable", "proper", "satisfactory", or words of like effect or import, unless otherwise particular specified herein, shall mean approved, reasonable, suitable, proper, or satisfactory in the judgement of the Borough of Naugatuck Inspector.					
The word "Contractor" shall mean	or i	t's duly authorized agents.			
II Contract Includes					
The indices, headings and subheading the Contract Documents.	gs are for convenience only	and do not form a part of			
The Contractor shall, at his own sole cost and expense, furnish all labor, materials, and other services necessary for the completion of this Contract and shall complete and finish the same in the most thorough, workmanlike, and substantial manner, in every respect, to the satisfaction and approval of the Borough of Naugatuck Inspector, in the manner and within the time hereinafter limited, and in strict accordance with the Advertisement, Information for Bidders, Proposal, General Requirements, Detailed Specifications, and Addenda hereto attached, and the Contract Drawings herein referred to, (collectively the "contract documents"), which contract documents are hereby made a part of this Contract as fully as if the same were repeated at length herein.					
Addendum No Dated:	Addendum No	Dated:			
Addendum No Dated:	Addendum No	Dated:			
Addendum No Dated:	Addendum No	Dated:			

III Specifications and Contract Drawings Supplementary

The said Specifications and Contract Drawings are intended to supplement each other, and together constitute one complete set of Specifications and Contract Drawings, so that any work exhibited in the one and not in the other shall be executed just as if it had been set forth in both, in order that the work shall be completed in every respect according to the complete design or designs as decided and determined by the Borough of Naugatuck Inspector. Should anything be omitted from the Specifications and Contract Drawings, the Contractor shall promptly notify the Borough of Naugatuck Inspector. From time to time during the progress of the work, the Borough of Naugatuck Inspector will furnish such supplementary or working drawings as are necessary to show changes or define the work in more detail, and these also shall be considered as Contract Drawings. When discrepancies exist between the Contract Drawings and Specifications, the Specifications shall govern.

IV Modifications

The Contractor, in entering into this Contract, understands that the Owner reserves the right to modify, to the extent herein provided, the arrangement, character, grade, or size of the work or appurtenances whenever, in the Owner's opinion, it shall be deemed necessary or advisable to do so. Minor changes in the work, not involving extra cost and consistent with the purposes of the work, may be made by verbal order, but no modifications involving extra work or material changes shall be made unless ordered in writing by the Borough of Naugatuck Inspector; and if the modification requires additional cost, a purchase order must be issued prior to work commencing. The Contractor shall and will accept such modifications when ordered in writing by the Owner through the Borough of Naugatuck Inspector, and the same shall not vitiate or void this Contract.

Any such modifications so made shall not, however, subject the Contractor to increased expense without equitable compensation, which shall be determined by the Borough of Naugatuck Inspector. If such modifications result in a decrease n the cost of work involved, and equitable deduction from the Contract price, to be determined by the Borough of Naugatuck Inspector, shall be made. The Borough of Naugatuck Inspector's determination of such additional compensation, or of any such deduction, shall be based upon the unit prices in the Contractor's bid, unless the modification involves work not included in such bids and then in the event, the modification shall be as set forth in Section XXVIII prior to the commencement of additional work. In no event shall any modification in the work shown on the Plans and Specifications be made unless the nature and extent thereof has first been certified by the Borough of Naugatuck Inspector in writing and sent to the Contractor.

V Correction of Errors and Omissions

The Plans and Specifications forming part of this Contract are intended to be explanatory of each other, but should any discrepancy appear, or misunderstanding arise, as to the import of anything contained in either, the explanation and decision of the Borough of Naugatuck Inspector shall be final and binding on the Contractor; and all directions and explanations required, to complete and make effective any of the provisions of the Contract and Specifications, shall be given by the Borough of Naugatuck Inspector. Corrections of errors and omissions in the Drawings or Specifications may be made by the Borough of Naugatuck Inspector when such corrections are necessary for the proper fulfillment of the Contract Documents as construed by the Borough of Naugatuck Inspector. The effect of such corrections shall date from the time that the Borough of Naugatuck Inspector gives due notice thereof to the Contractor.

VI Borough of Naugatuck Inspector's Decision

All work under this Contract shall be done to the satisfaction of the Borough of Naugatuck Inspector, who shall determine the amount, quality, acceptability, and fitness of the several items of work and materials which are to be paid for hereunder. He also shall decide all questions which may arise as to the fulfillment of the terms of the Contract, Plans and Specifications. The determination of the Borough of Naugatuck Inspector in all such matters shall be final and binding upon the parties thereto.

VII <u>Inspection of Work</u>

It is agreed that the Owner may, at its pleasure, appoint and employ, at its own expense, such persons as may be necessary, who are to act as Borough of Naugatuck Inspectors, inspections, or agents, for the purpose of determining, in the Borough's interest, that the materials furnished and the work done, as the work progresses, conforms to the requirements of the Contract Documents. Such persons shall have unrestricted access to all parts of the work and to other places at and where the preparation of the materials and other parts of the work to be done under this Contract are carried on and conducted. They shall be given, by the Contractor, all facilities and assistance required to carry out their work of inspection.

It is not the function of the Borough of Naugatuck Inspector to supervise or direct the manner in which the work to be done under this Contract is carried on or conducted. The Borough of Naugatuck Inspector is not responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the work, and he will not be responsible for the Contractor's failure to carry out the work in accordance with the Contract Documents.

The Borough of Naugatuck Inspector shall have authority to reject and shall reject any work or material, or any part thereof, which does not, in his opinion, conform to the Contract Drawings, working drawings, Specifications, and Contract, and it shall be permissible for him to do so at any time during the progress of the work.

No work shall be done except in the presence of the Borough of Naugatuck Inspector or his assistants. No material of any kind shall be used upon the work until it has been inspected and accepted by the Borough of Naugatuck Inspector. Any materials or workmanship found at any time to be defective, or not of the quality or character required by the Contract Drawings and Specifications, shall be remedied at once regardless of previous inspection.

Such inspection shall not relieve the Contractor from any obligation to perform said work strictly in accordance with the Contract Drawings and Specifications, and work not so constructed shall be removed and made good by the Contractor at this own expense and free of all expense to the Owner, whenever so ordered by the Owner, without reference to any previous oversight or error in inspection.

VIII Address of Contractor

The address in the Proposal, upon which this Contract is based, shall be the place. The delivering at the above-named place of any such notice, letter, or other communication where notices, letters or other communications to the Contractor may be mailed or delivered, from the Borough to the Contractor, the date of said service shall be the date of such delivery. Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter, or other communication upon the Contractor personally.

IX Obligation of the Contractor

The Contractor shall, at his own expense, provide any and all manner of supervisor, insurance, taxes, labor, materials, apparatus, scaffolding, appliances, tools, machinery, power, transportation, and whatever else may be required of every description necessary to do and complete the work and shall be solely answerable for the same and for the safe, proper, and lawful construction, maintenance, and use thereof. The Contractor shall cover and protect the work from damage and shall make good all injury to the same occurring before completion of this Contract. The Contractor shall employ only competent workmen and shall provide experienced superintendents and foremen on each part of the work.

The Contractor shall, at it's own expense, wherever necessary or required, maintain fences, provide watchmen, maintain lights, place additional timber and braces, and take such other precautions as may be necessary to protect life, property, and structures, vehicles and pedestrians and shall be liable for all damages, occasioned in any way by his act or neglect or that of this agent, employees, or workmen. He shall provide access at all times to private property.

X Occupational Safety and Health Act

The applicable sections of the Occupational Safety and Health Act of 1970 (Williams-Steiger Act) shall apply and be made a part of this Contact. The Contractor's attention is particularly directed to the record keeping requirements of this Act.

XI Nondiscrimination in Employment

The Contractor agrees and warrants 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.

XII Personal Attention and Competent Workmen

The Contractor shall give his personal attention constantly to the faithful prosecution of the work and shall be present, either in person or by a duly authorized representative, on the site of the work continually during its progress to receive directions or instructions from the Borough of Naugatuck Inspector. The Contractor shall employ at the site, during the performance of the work, a competent superintendent or foreman who shall be satisfactory to the Borough of Naugatuck Inspector and who shall not be changed, except with the consent of the Borough of Naugatuck Inspector, unless he shall cease to be an employee of the Contractor. Such superintendent or foreman shall represent and have full authority to act for the Contractor in his absence, and all directions and instructions given such superintendent or foreman shall be as binding as if given to the Contractor.

The Contractor shall employ only competent, skillful men to do the work, and whenever the Borough of Naugatuck Inspector shall notify the Contract in writing that any man on the work is, in his opinion, incompetent, unfaithful, disorderly, or otherwise unsatisfactory, such man shall be discharged from the work and shall not again be employed on it, except with the consent of the Borough of Naugatuck Inspector.

XIII Public Safeguards

The Contractor agrees to conduct the work at all times in such a manner that public travel shall not be inconvenienced needlessly nor shall it be wholly obstructed at any point.

XIV Materials and Workmanship

It is the intent of the Specifications to describe fully and definitely the character of materials and workmanship furnished regarding all ordinary features and to require first-class work and materials in all particulars. For any unexpected features arising during the progress of the work and not fully covered herein, the Specifications shall be interpreted by the Borough of Naugatuck Inspector to require first class work and materials in all respects, and such interpretation shall be accepted by the Contractor.

XV Materials and Manufactured Articles

All materials and workmanship shall be subject to the approval of the Borough of Naugatuck Inspector and shall be in conformity with approved modern practice.

Unless otherwise specifically provided for in the Specifications, all materials incorporated in the work shall be new, of standard and first-class quality, and of the best workmanship and design. No inferior, or low grade, material will be either approved or accepted, and all work of assembly and construction must be done in a neat, first-class, and workmanlike manner.

XVI Unnoticed Defects

The inspection of the work and materials by the Borough of Naugatuck Inspector shall not relieve the Contractor of any of his obligations to fulfill this Contract, as herein described, and defective work shall be made good and unsuitable materials shall be rejected, notwithstanding that such work and materials had been previously overlooked by the Borough of Naugatuck Inspector and accepted or estimated for payment. If the work, or any part thereof, shall be found defective at any time before final acceptance of the whole work, the Contractor shall forthwith make good such defects, in a manner satisfactory to the Borough of Naugatuck Inspector.

XVII Care and Protection of Work

From the commencement of the work until the completion of the same, the Contractor shall be solely responsible for the care of the work covered by the Contract and for the materials delivered at the site intended to be used in the work; and all injury, damage, or loss of the same, from whatever cause, shall be made good at his expense before the final estimate is made. He shall provide suitable means of protection for all materials intended to be used in the work and for all work in progress as well as for completed work. He shall take all necessary precautions to prevent injury or damage to the work under construction by flood, freezing or inclement weather at any and all times. The methods used for this purpose shall be subject to the approval of the Borough of Naugatuck Inspector, but shall not relieve the Contractor from liability for inadequate protection of the work or materials.

XVIII <u>Assignment of Contract</u>

The Contractor shall have no right or power to assign this Contact, in whole or in part, nor to assign any right arising, or moneys due or to grow due thereunder, without prior written approval of the Owner.

XIX Subcontracting

The Contractor may utilize the services of specialty subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty subcontractors. The Contractor shall not award the work to a subcontractor(s) without prior written approval of the

Owner. The Contractor shall be fully responsible to the Owner for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

XIX Subcontracting (continued)

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work to bind subcontractors to the Contractor by the terms of these Contract Documents, insofar as applicable to the work of subcontractors, and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provisions of these Contract Documents.

Nothing contained in this contract shall create any contractual relation between any subcontractor and the Owner.

XX Liability of Contractor for Employees

Each and every employee of the Contractor and each and every of his subcontractors engaged in the said work shall, for all purposes, be deemed and taken to be the exclusive servants of the Contractor and not for any purpose or in any manner in the employment of the Owner. The Contractor shall, in no manner, be relieved from responsibility or liability on account of any fault or delay in the execution of the said work, or any part thereof, by any such employee, or any such subcontractor, or any material men, whatsoever.

XXI Coordination With Other Contractors and Utilities

During the progress of the work, existing utilities may be found to be in close proximity to or in conflict with the work being installed. The Contractor shall make every effort to identify and locate these utilities before working in the area. If it is known or found that these utilities exist the Contractor shall contact the appropriate utility and alert them to the situation. Should an existing utility be found to be in close proximity to the work the Contractor shall take all the necessary precautions to protect the utilities and his work. Should existing utilities be found to conflict with the work the Contractor shall arrange with the utility company for their adjustment. No additional compensation will be made for delays, inconvenience or damage sustained by the Contractor due to interference from the above-noted utility appurtenances or the operation of locating, installing or moving them or the inability of others to perform their work in a timely manner.

XXII Permits, Laws, Codes, Ordinances and Insurance

The Contractor shall keep himself fully informed of all existing and current codes, ordinances, and regulations and Municipal, County, State or National laws in any way limiting or controlling the actions or operations of those engaged upon the work or affecting the materials supplied to or by them. He shall, at all times, observe and comply with all such valid and legally binding ordinances, laws, and regulations and shall protect and indemnify the Owner and its representatives and agents against any claim or liability arising from, or based on, any violation of the same. He shall obtain and pay for all necessary permits and pay all fees required in connection with the Contract. Contractor shall provide the types and amounts of insurance as set forth in Section 19, Information of Bidders and maintain in effect. He shall take out and carry appropriate employer's liability insurance and public liability insurance.

XXIII Patent Rights

The Contractor shall indemnify and save harmless the Owner and its officers, agents, and representatives from all claims for damages a rising from the infringements, or alleged infringements, of any Letters Patent or patent rights covering any material, appliance, or device used in or upon the work or any part thereof.

XXIII Patent Rights (continued)

All royalties for patents or patent infringement claims, that might be involved in the construction or use of the work, shall be included in the Contract amount; and the Contractor shall satisfy all demands that may be made at any time for such and shall be liable for any damage or claims for patent infringements; and the Contractor shall, at his own expense, defend any and all suits or proceedings that may be instituted against the Owner for infringement, or alleged infringement, of any patent or patents involved, or alleged to be involved, in the work; and in case of any award for damages, the said Contractor shall pay such award.

XXIV Defense of Suits

The Contractor shall indemnify and hold harmless the Owner and it's consultants, agents and employees from and against all claims, damages, losses, and expenses, including, but not limited to, attorney fees, ("indemnification expense") arising out of or resulting from the performance of the work or arising out of or resulting from the Contract Documents, including, without limitation, all indemnification expense regarding personal injury or death and/or damage to real or personal property or motor vehicles.

In claims against any person or entity indemnified under this section by an employee or the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Section shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts.

XXV Claims for Labor and Materials

The Contractor shall indemnify and save harmless the Owner from all claims expenses and for judgements regarding labor done or materials furnished under this Contract, or any alterations or modifications thereof, including without limitation, reasonable Attorney's fees. Contractor shall furnish the Owner with a Mechanic's Lien Waiver from all persons who have done work, or furnished materials under this Contract. In case such waiver is not furnished, an amount necessary or sufficient, within the discretion of the Owner, to meet the claims of the persons aforesaid, shall be retained, as herein specified, from the money due the Contractor under this Contract until the liabilities aforesaid shall be fully discharged or satisfactorily secured.

XXVI Completion of Work by Owner

If the work to be done under this Contract shall be abandoned by the Contractor; or if this Contract shall be assigned, or the work sublet by him, otherwise than as herein specified; or if at any time the Owner shall be of the opinion that the performance of the Contract is unnecessarily or unreasonably delayed; or if the Contractor is willfully violating any of the conditions or covenants of this Contract, or of the Specifications, or is executing the same in bad faith or not in accordance with the terms thereof; of if the work be not fully completed within the time named in this Contract for its completion, or within the time to which the completion of the Contract may be extended by the Owner, the Owner may notify the Contractor to discontinue all work, or any part thereof under his Contract, by a written notice to be served upon the Contractor as herein provided.

The Contractor shall, within five (5) days of the service of said written notice, discontinue the work, or such part thereof, and the Owner shall thereupon have the power to contract for the completion of the Contract, in the manner prescribed by law; or to place such and so many persons as it may be deemed advisable, by contract or otherwise, to work, and complete the work herein described, or such part thereof; or to take possession of and use any of the materials, plant,

tools, equipment, supplies, and property of every kind provided by the Contractor for the purpose of his work; and to procure other materials and equipment for the completion of the same; and to charge the expense of said labor, materials and equipment to the Contractor.

The expense so charged shall be deducted and paid by the Owner out of such moneys as may be due, or may at any time thereafter grow due to the Contractor under and by virtue of this Contract, or any art thereof; and in case such expense shall exceed the amount which would have

XXVI Completion of Work by Owner (continued)

been payable under the Contract, if the same had been completed by the Contractor, the Contractor or his surety shall pay the amount of such excess to the Owner within five (5) days of written demand therefore; and in case such expense shall be less than the amount which would have been payable under this Contract, if the same had been completed by the Contractor, the owner shall pay such difference to the Contractor within five (5) days of written demand.

XXVII Partial and Final Estimates

On, or about, the last day of the month, the Borough of Naugatuck Inspector shall make an approximate estimate of the value of the work done and of the materials incorporated into the work.

The Owner will pay the Contractor, within 30 days of receipt of an estimate, ninety-five percent (95%) of the total estimated value of the work done, as estimated by the Borough of Naugatuck Inspector less previous payments. Partial payments will not be made whenever the amounts of the estimate or estimates of work done since the last previous estimate are less than \$2,000.00.

The Borough of Naugatuck Inspector shall, as soon as practicable after the completion of work, make a final certificate of the entire amount of the work done under this Contract, and the value thereof, and the Owner shall, within thirty (30) days after such final estimate is approved, pay the entire sum so found to be due hereunder, after deducting there from all previous payments and also all percentages and deductions to be retained under any of the provisions of this Contract.

Before payment of each estimate, the Contractor shall provide the Owner with a mechanic's lien waiver from the Contractor and all persons who have done work or furnished materials under this Contract.

XXVIII Extra Work

The Contractor shall and will do any and all work and furnish any and all materials not herein provided for which, in the opinion of the Borough of Naugatuck Inspector, may be found necessary or advisable for the proper completion of the work or the purposes thereof, or any modifications or alternations thereto.

All extra work and materials shall be ordered in writing by the Borough of Naugatuck Inspector, and in no case will any work or materials in excess of the amount shown in the Plans and Specifications be paid for unless so ordered. Additionally, if the extra work requires additional cost, a purchase order must be issued prior to work commencing. No claim for delay shall be made as a result of this process. No voucher, claim or charge against the Borough shall be paid, nor is the Borough liable for any voucher, claim or charge unless a purchase order is issued. The Contractor further agrees that he shall accept, as full compensation for such extra work and materials, the unit price bid, in the case of Items covered by unit prices in the Proposal, and no more; and for such Items as are not covered by a unit price, he shall accept as full compensation:

- 1. an agreed on lump sum price, or
- 2. the reasonable cost, as determined by the Borough of Naugatuck Inspector, of all necessary labor, including insurance and payroll taxes, equipment rental, and materials, plus fifteen percent (15%) which covers supervision, the use of tools and plant, and other overhead expenses and profit.

The equipment rental charge shall be at prevailing rates usually paid locally but shall in no case exceed the amount prorated on the basis of the monthly equipment rental rates compiled by the Associated Equipment Distributors.

When extra work is performed by an approved subcontractor, the Contractor shall be entitled to five percent (5%) of the direct cost of the subcontractor's work to cover his overhead expenses and profit.

The Contractor agrees to prosecute such extra work with all reasonable diligence and to employ thereon competent men. The Contractor shall give the Borough of Naugatuck Inspector access to all accounts, bills, payrolls, and vouchers relating to extra work not covered by unit prices, and he agrees that he shall have no claim for compensation for such extra work in the case of items not covered by unit prices, unless a statement in writing of the actual cost of the same, fully itemized as to labor and materials, is presented to the Borough of Naugatuck Inspector before the fifteenth (15th) day of the month following that during which each specific order was complied with by him.

XXIX Payment

The Owner, in consideration of the faithful performance by the Contractor of all and singular his covenants, promises, and agreements contained herein, agrees to pay the Contractor for the full completion by him of the work embraced in this Contract, in the manner and within he time herein specified and limited, and to the satisfaction and approval of the Borough of Naugatuck Inspector, the prices stipulated in the said Proposal hereto attached, such payment to be made at the times and in the manner and upon the conditions herein expressly provided. The Owner also agrees to pay in addition such amounts as may be agreed upon for modifications and for extra work.

XXX Guarantee

The Contractor guarantees that the work done under this Contract and the materials furnished by him and used in the construction of the same are free from defects or flaws. The guarantee is for a term of one (1) year from, and after, the date upon which the final estimate of the Borough of Naugatuck Inspector is formally approved by the Owner. It is hereby agreed and understood that this guarantee shall not include making any repairs made necessary by any cause or causes other than defective materials furnished by, or defective work done by, the Contractor.

XXXI Repairs for One (1) Year

The said party of the second part further agrees that the said Owner shall be and is hereby authorized to retain, out of the monies payable to the said Contractor under this Agreement, the sum of two percent (2%) of the amount of the Contract and to expend the same, in the manner hereinafter provided for, in making said repairs on the work as may be required by the Contractor's guarantee under Article XXX.

XXXI Repairs for One (1) Year (continued)

And it is further agree that if, at any time during the period of one (1) year from the date of the final estimate of the work herein contracted for, any part of the work done under this Contract shall be deemed by the Borough of Naugatuck Inspector to require repairing under the aforesaid Contractor's guarantee, then the said Owner shall notify the said Contractor to make the repairs so required at no expense to the Owner.

Such replacements, or repairs, shall be undertaken by the Contractor within twenty-four (24) hours after service of notice. If the Contractor unnecessarily delays or fails to make the ordered replacements or repairs within the time specified, or if any replacements or repairs are of such nature as not to allow for the time delay incident to the service of a notice, then the Owner will have the right to make such replacements or repairs, and the expenses thereof shall be paid by the Contractor.

And the Borough hereby agrees that upon the expiration of the said period of one (1) year, provided that the work at the time shall be in good order, the Contractor shall be entitled to receive the whole or such part of the sum last aforesaid as may remain after the expense of making said repairs, in the manner aforesaid, shall have been paid therefrom, but if the said expense is in excess of the sum of two percent (2%) retained, the Contractor shall pay to the Owner the amount of the excess.

It is, however, agreed that the Borough may apply or keep the sum so retained for payment of other claims arising under the provisions of the contract document.

XXXII Rate of Progress and Time of Completion

The Contractor shall commence work within ten (10) calendar days of the date of the Notice to Proceed. The rate of progress shall be such that the whole work shall be performed and the grounds cleared up in accordance with the Contract and Specifications within one hundred eighty (180) calendar days unless extensions of time shall be made for the reasons, and in the manner, stated under Article XXXIII, "Extension of Time".

The above calendar days includes time for the Contractor to obtain approval of a Erosion and Sediment Control Plan, as applicable.

XXXIII Extension of Time

The Contractor expressly covenants and agrees that, in undertaking to complete the work within the time mentioned, he has taken into consideration, and made allowance for, all of the ordinary delays and hindrances incidental to such work, whether growing out of delays in securing materials or workmen or otherwise. Should the Contractor, however, be substantially delayed in the prosecution and completion of the work by any changes, additions, or omissions therein ordered in writing by the Borough of Naugatuck Inspector, or by fire, lightning, earthquake, tornado, cyclone, riot, insurrection, or war, or by the abandonment of the work by the workman engaged therein through no fault of the Contractor, or by the discharge of all or any material number of workmen in consequence of difficulties arising between the Contractor and such workmen, or by the neglect, delay, or default of any other contractor of the Owner, then the Contractor may, within five (5) days after the occurrence of the delay for which he claims allowance, notify the Borough of Naugatuck Inspector thereof in writing, and thereupon, and not otherwise, the Contractor shall be allowed such additional time for the completion of the work as the Borough of Naugatuck Inspector, in his discretion, shall award in writing, and his decision shall be final and conclusive upon the parties.

XXXIV <u>Damages for Failure to Complete on Time</u>

The Contractor shall pay to the Owner for each and every calendar day (including Saturdays, Sundays, and holidays) that he shall be in default in completing the entire work in the time stipulated in Article XXXII, or within the extension of time he may be granted as provided in Article XXXIII, the sum of Two Hundred Dollars (\$200.00) per day. This sum is hereby agreed upon not as a penalty but as liquidated damages which Owner will suffer by reason of such default, time being of the essence of the Contract and a material consideration thereof. The Owner shall have the right to deduct the amount of any such damages from any monies due the Contractor under this Contract.

XXXV No Waiver of Rights

No certificate given or payment made under this Contract, except the final certificate or final payment, shall be evidence of the performance of the Contract either wholly or in part, and no payment shall be construed to be an acceptance of defective work or improper materials. No act of the Owner or of the Borough of Naugatuck Inspector, or of any representatives of either of them in inspecting the work, nor any extension of time for the completion of the work, shall be regarded or taken as an acceptance of such work, or any part thereof, or materials used therein or thereof, either wholly or in part; but such acceptance shall be evidenced only by the final certificate of the Borough of Naugatuck Inspector.

Before any final certification shall be allowed, the Contractor shall be required, and he hereby agrees, to sign and attest on said certificate a statement that he accepts the same in full payment and settlement of all claims on account of work done and material furnished under this Contract, and furthermore, that all claims for materials provided or labor performed have been paid and satisfied in full. No waiver of any breach of this Contract by the Owner or anyone acting for it, or on its behalf, shall be held as a waiver of any other or subsequent breach thereof.

XXXVI Mandatory Negotiation

Contractor and the Owner agree that they will attempt to negotiate in good faith any dispute of any nature arising under this contract. The parties shall negotiate in good faith at not less than two negotiation sessions prior to seeking any resolution of any dispute under the provisions of arbitration paragraph of this contract. Each party shall have the right to legal representation at any such negotiation session.

XXXVII Arbitration

Any dispute or question arising under the provisions of this contract which has not been resolved under the mandatory negotiation paragraph of this contract shall be determined by arbitration. Arbitration proceedings shall occur at a neutral location in Waterbury, Connecticut, and shall be conducted in accordance with the rules then applicable of the American Arbitration Association. Arbitration shall proceed before a pane of one arbitrator to be selected by American Arbitration Association. The decision of the Arbitrator shall be final and may be entered in any court having jurisdiction thereof. Each party shall pay one-half of all costs and expenses of such arbitration.

XXXVIII Owner's Right to Use

The Owner reserves the right to use or occupy any portion of the work considered by the Borough of Naugatuck Inspector as ready for use or occupancy. Such use or occupancy shall not be held, in any way, as final acceptance of the work or any portion thereof, or as a waiver of any portion of this Contract.

XXXIX Verification of Data

The quantities of work to be done and the materials to be furnished under this Contract, as given in the accompanying "Information for Bidders" and on the Proposal form, are approximate estimates for the purpose of comparing bids on a uniform basis. Neither the Owner nor the Borough of Naugatuck Inspector are to be held responsible for the data or information given relative to said quantities or that given on the Plans relative to existing conditions. The Contractor has judged for himself as to such quantities and as to other circumstances affecting the cost of the performance of this Contract, and he shall not at any time assert that there was any misunderstanding in regard to the character or amount of work to be done and materials and labor to be furnished.

XXXX Contractor's Wage Certification Form

If applicable the Contractor or his authorized agent will be required to sign the Contractor's Wage Certification Form at the time of Contract execution.

XXXXI Verbal Statements Not Binding

It is understood and agreed that the written terms and provisions of this Agreement shall supersede all prior verbal statements of the Borough of Naugatuck Inspector or other representatives of the Owner, and such statements shall not be effective or be construed as entering into or forming a part of, or altering in anyway whatsoever, the written Agreement.

XXXXII Final Estimate Constitutes Release

It is agreed that acceptance by the Contractor of the last payment made, under the provisions of Article XXVII, shall operate as and shall be a release to the Owner, and every agent thereof, from all claims and liability to Contractor for anything done or furnished for, or relating to, the work or for any act or neglect of the Owner or of any agent thereof, except any claim against the Owner for the remainder, if any, of the amounts kept or retained by the Owner as percentages or deductions.

No payment, however, final or otherwise, shall operate to release the Contractor or his sureties from any obligations under this Contract.

XXXXIII Delays or Termination by Governmental Authorities

Notwithstanding any other provision(s) of this contract, the parties agree that in the event of a stop work order from the State Department of Transportation, Department of Environmental Protection, or any other State or Federal agency, no additional compensation will be made by Owner to Contractor for delays, inconvenience or damage sustained by Contractor due to such order, including, without limitation, damages for loss of use of equipment or idle equipment. Similarly, in the event of a termination of the project by the State DOT, DEP or any other State or Federal agency, no additional compensation will be made by Owner to Contractor for the termination, or for any delay, inconvenience or damage sustained by Contractor due to such termination, including, without limitation, damages for loss of use of equipment or idle equipment. In the event of such termination, the Borough of Naugatuck Inspector shall prepare a final certificate for the entire amount of work done up to the effective date of termination. The provisions of Sections XXX (Guarantee) and XXXI (Repair) shall apply to all work completed as of the effective date of any stop Work order, as if the effective date was the date upon which the final estimate of the Borough of Naugatuck Inspector is formally approved by the Borough.

XXXXIV Validity of Agreement

The provision of this Agreement shall be binding upon the Parties and their respective successor or assigns.

IN WITNESS WHEREOF, t signed by their respective duly con resolutions.	he said parties hereto have caused this instrument to be stituted officers, attested, and sealed pursuant to proper
Signed and sealed in the presence of	
	Borough of Naugatuck Mayor
	(Duly Authorized) Contractor

CERTIFICATE AS TO CORPORATE PRINCIPAL

I,	certify that I am the	of the
Corporation named as Cont	ractor in the within bond; that	, who signed
the said bond on behalf of t	he Contractor was then	of said corporation;
that I know his signature, ar	nd his signature thereto is genuine; and	d that said bond was duly
signed, sealed, and attested	to for and in behalf of said corporatio	n by authority of this governing
body.		
		(Corporate
		Seal)
		Title

SECTION F

PERFORMANCE BOND

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that	
(Name of Contractor)	•
(Address of Contractor)	
a, here, (Corporation, Partnership, or Individual)	einafter called Principal and
(Name of Surety)	
(Address of Surety)	
hereinafter called Surety, are held and firmly bound unto	
(Name of Owner)	
(Address of Owner)	-
hereinafter called OWNER, in the penal sum of	•
THE CONDITION OF THIS OBLIGATION is such that wherea certain contract with the OWNER, dated theday of which is hereto attached and made a part hereof for the construction	, 200, a copy of
NOW, THEREFORE, if the Principal shall well, truly and faithfundertakings, covenants, terms, conditions, and agreements of satterm thereof, an any extensions thereof which may be granted by notice to the Surety and during the one year guaranty period, and if demands incurred under such contract, and shall fully indemnify a from all costs and damages which may suffer by reason of failure and repay the OWNER all outlay and expense which the OWNER default, then this obligation shall be void; otherwise to remain in fully PROVIDED, FURTHER, that the said surety, for value received he no change, extension of time, alteration or addition to the terms of the performed thereunder or the SPECIFICATIONS accompanying	d contract during the original the OWNER, with or without the shall satisfy all claims and and save harmless the OWNER to do so, and shall reimburse may incur in making good any ll force and effect. The steps stipulates and agrees that the contract or to WORK to

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 contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

ATTEST:			
ATTEST.		Principal	
	By	1	(s)
(Principal) Secretary			
(SEAL)			
(Witness as to Principal)	_	(Address)	
(Address)			
ATTEST:		Surety	
(Surety) Secretary	_		
(SEAL)	By		
Witness as to Surety		Attorney	-in-Fact
(Address)		(Address)	

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

If CONTRACTOR is Partnership, all partners should execute BOND.

SECTION G PAYMENT BOND

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that (Name of Contractor) (Address of Contractor) , hereinafter called Principal and (Corporation, Partnership, or Individual) (Name of Surety) (Address of Surety) hereinafter called Surety, are held and firmly bound unto (Name of Owner) (Address of Owner) 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, successors, and assigns, 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:

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, an any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which 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 WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in anyway 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 contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is e			
which shall be deemed an original, this the	day of		, 200
ATTEST:	By	Principal	(s)
(Principal) Secretary	<i>D</i> _j		(5)
(SEAL)			
(Witness as to Principal)		(Address)	
(Address)			
ATTEST:	-	Surety	
(Surety) Secretary			
(SEAL)	Ву		
Witness as to Surety	J	Attorney-in-Fact	
(Address)		(Address)	

NOTES: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

SECTION H

Prevailing Wage Rates





THIS IS A PUBLIC WORKS PROJECT

Covered by the

PREVAILING WAGE LAW

CT General Statutes Section 31-53

If you have QUESTIONS regarding your wages CALL (860) 263-6790

Section 31-55 of the CT State Statutes requires every contractor or subcontractor performing work for the state to post in a prominent place the prevailing wages as determined by the Labor Commissioner.

Project: Pavement Preservation Crack Sealing

Minimum Rates and Classifications for Heavy/Highway Construction

ID#: **H** 22516

Connecticut Department of Labor Wage and Workplace Standards Division

By virtue of the authority vested in the Labor Commissioner under provisions of Section 31-53 of the General Statutes of Connecticut, as amended, the following are declared to be the prevailing rates and welfare payments and will apply only where the contract is advertised for bid within 20 days of the date on which the rates are established. Any contractor or subcontractor not obligated by agreement to pay to the welfare and pension fund shall pay this amount to each employee as part of his/her hourly wages.

Project Number: Project Town: Naugatuck

FAP Number: State Number:

Project: Pavement Preservation Crack Sealing

CLASSIFICATION	Hourly Rate	Benefits
01) Asbestos/Toxic Waste Removal Laborers: Asbestos removal and encapsulation (except its removal from mechanical systems which are not to be scrapped), toxic waste removers, blasters. **See Laborers Group 5 and 7**		
1) Boilermaker	33.79	34% + 8.96
1a) Bricklayer, Cement Masons, Cement Finishers, Plasterers, Stone Masons	33.48	28.76
2) Carpenters, Piledrivermen	32.00	24.42

Project: Pavement Preservation Crack Sealing		
2a) Diver Tenders	32.00	24.42
3) Divers	40.46	24.42
03a) Millwrights	32.47	24.84
4) Painters: (Bridge Construction) Brush, Roller, Blasting (Sand, Water, etc.), Spray	46.95	20.15
4a) Painters: Brush and Roller	32.02	20.15
4b) Painters: Spray Only	35.02	20.15
4c) Painters: Steel Only	34.02	20.15

Project: Pavement Preservation Crack Sealing		
4d) Painters: Blast and Spray	35.02	20.15
4e) Painters: Tanks, Tower and Swing	34.02	20.15
5) Electrician (Trade License required: E-1,2 L-5,6 C-5,6 T-1,2 L-1,2 V-1,2,7,8,9)	38.02	23.75+3% of
1,2,7,0,7)		gross wage
6) Ironworkers: Ornamental, Reinforcing, Structural, and Precast Concrete Erection	35.22	31.99 + a
Licetton .		
7) Plumbers (Trade License required: (P-1,2,6,7,8,9 J-1,2,3,4 SP-1,2) and Pipefitters (Including HVAC Work) (Trade License required: S-1,2,3,4,5,6,7,8	40.62	29.71
B-1,2,3,4 D-1,2,3,4 G-1, G-2, G-8, G-9)		
LABORERS		
8) Group 1: Laborer (Unskilled), Common or General, acetylene burner, concrete specialist	28.55	18.90

Project: Pavement Preservation Crack Sealing		
9) Group 2: Chain saw operators, fence and guard rail erectors, pneumatic tool operators, powdermen	28.80	18.90
10) Group 3: Pipelayers	29.05	18.90
11) Group 4: Jackhammer/Pavement breaker (handheld); mason tenders (cement/concrete), catch basin builders, asphalt rakers, air track operators, block paver, curb setter and forklift operators	29.05	18.90
12) Group 5: Toxic waste removal (non-mechanical systems)	30.55	18.90
13) Group 6: Blasters	30.30	18.90
Group 7: Asbestos/lead removal, non-mechanical systems (does not include leaded joint pipe)	29.55	18.90
Group 8: Traffic control signalmen	16.00	18.90

Group 9: Hydraulic Drills	29.30	18.90
LABORERS (TUNNEL CONSTRUCTION, FREE AIR). Shield Drive and Liner Plate Tunnels in Free Air		
13a) Miners, Motormen, Mucking Machine Operators, Nozzle Men, Grout Men, Shaft & Tunnel Steel & Rodmen, Shield & Erector, Arm Operator, Cable Tenders	32.22	18.90 + a
13b) Brakemen, Trackmen	31.28	18.90 + a
CLEANING, CONCRETE AND CAULKING TUNNEL		
14) Concrete Workers, Form Movers, and Strippers	31.28	18.90 + a
15) Form Erectors	31.60	18.90 + a

Project: Pavement Preservation Crack Sealing

Project: Pavement Preservation Crack Sealing ----ROCK SHAFT LINING, CONCRETE, LINING OF SAME AND TUNNEL IN FREE AIR:----16) Brakemen, Trackmen, Tunnel Laborers, Shaft Laborers 31.28 18.90 + a17) Laborers Topside, Cage Tenders, Bellman 31.17 18.90 + a32.22 18) Miners 18.90 + a----TUNNELS, CAISSON AND CYLINDER WORK IN COMPRESSED AIR: ----18a) Blaster 38.53 18.90 + a19) Brakemen, Trackmen, Groutman, Laborers, Outside Lock Tender, Gauge 38.34 18.90 + aTenders

Project: Pavement Preservation Crack Sealing		
20) Change House Attendants, Powder Watchmen, Top on Iron Bolts	36.41	18.90 + a
21) Mucking Machine Operator	39.11	18.90 + a
TRUCK DRIVERS(*see note below)		
Two axle trucks	28.83	21.39 + a
Three axle trucks; two axle ready mix	28.93	21.39 + a
Three axle ready mix	28.98	21.39 + a
Four axle trucks, heavy duty trailer (up to 40 tons)	29.03	21.39 + a

Project: Pavement Preservation Crack Sealing		
Four axle ready-mix	29.08	21.39 + a
Heavy duty trailer (40 tons and over)	29.28	21.39 + a
Specialized earth moving equipment other than conventional type on-the road trucks and semi-trailer (including Euclids)	29.08	21.39 + a
POWER EQUIPMENT OPERATORS		
Group 1: Crane handling or erecting structural steel or stone, hoisting engineer (2 drums or over), front end loader (7 cubic yards or over), Work Boat 26 ft. & Over, Tunnel Boring Machines. (Trade License Required)	38.55	23.55 + a
Group 2: Cranes (100 ton rate capacity and over); Excavator over 2 cubic yards; Piledriver (\$3.00 premium when operator controls hammer); Bauer Drill/Caisson. (Trade License Required)	38.23	23.55 + a
Group 3: Excavator/Backhoe under 2 cubic yards; Cranes (under 100 ton rated capacity), Gradall; Master Mechanic; Hoisting Engineer (all types of equipment where a drum and cable are used to hoist or drag material regardless of motive power of operation), Rubber Tire Excavator (Drott-1085 or similar); Grader Operator; Bulldozer Fine Grade (slopes, shaping, laser or GPS, etc.). (Trade	37.49	23.55 + a

License Required)

Project: Pavement Preservation Crack Sealing		
Group 4: Trenching Machines; Lighter Derrick; Concrete Finishing Machine; CMI Machine or Similar; Koehring Loader (Skooper)	37.10	23.55 + a
Group 5: Specialty Railroad Equipment; Asphalt Paver; Asphalt Spreader; Asphalt Reclaiming Machine; Line Grinder; Concrete Pumps; Drills with Self Contained Power Units; Boring Machine; Post Hole Digger; Auger; Pounder; Well Digger; Milling Machine (over 24" Mandrell)	36.51	23.55 + a
Group 5 continued: Side Boom; Combination Hoe and Loader; Directional Driller.	36.51	23.55 + a
Group 6: Front End Loader (3 up to 7 cubic yards); Bulldozer (rough grade dozer).	36.20	23.55 + a
Group 7: Asphalt Roller; Concrete Saws and Cutters (ride on types); Vermeer Concrete Cutter; Stump Grinder; Scraper; Snooper; Skidder; Milling Machine (24" and Under Mandrel).	35.86	23.55 + a
Group 8: Mechanic, Grease Truck Operator, Hydroblaster, Barrier Mover, Power Stone Spreader; Welder; Work Boat under 26 ft.; Transfer Machine.	35.46	23.55 + a
Group 9: Front End Loader (under 3 cubic yards), Skid Steer Loader regardless of attachments (Bobcat or Similar); Fork Lift, Power Chipper; Landscape Equipment (including hydroseeder).	35.03	23.55 + a

Project: Pavement Preservation Crack Sealing		
Group 10: Vibratory Hammer, Ice Machine, Diesel and Air Hammer, etc.	32.99	23.55 + a
Group 11: Conveyor, Earth Roller; Power Pavement Breaker (whiphammer), Robot Demolition Equipment.	32.99	23.55 + a
Group 12: Wellpoint Operator.	32.93	23.55 + a
Group 13: Compressor Battery Operator.	32.35	23.55 + a
Group 14: Elevator Operator; Tow Motor Operator (Solid Tire No Rough Terrain).	31.21	23.55 + a
Group 15: Generator Operator; Compressor Operator; Pump Operator; Welding Machine Operator; Heater Operator.	30.80	23.55 + a
Group 16: Maintenance Engineer/Oiler	30.15	23.55 + a

Project: Pavement Preservation Crack Sealing		
Group 17: Portable asphalt plant operator; portable crusher plant operator; portable concrete plant operator.	34.46	23.55 + a
Group 18: Power Safety Boat; Vacuum Truck; Zim Mixer; Sweeper; (minimum for any job requiring CDL license).	32.04	23.55 + a
**NOTE: SEE BELOW		
LINE CONSTRUCTION(Railroad Construction and Maintenance)		
20) Lineman, Cable Splicer, Technician	45.43	6.25% + 20.70
21) Heavy Equipment Operator	40.89	6.25% + 18.56
22) Equipment Operator, Tractor Trailer Driver, Material Men	38.62	6.25% + 17.99

Project: Pavement Preservation Crack Sealing		
23) Driver Groundmen	24.99	6.25% + 11.81
23a) Truck Driver	34.07	6.25% + 16.60
LINE CONSTRUCTION		
24) Driver Groundmen	30.92	6.5% + 9.70
25) Groundmen	22.67	6.5% + 6.20
26) Heavy Equipment Operators	37.10	6.5% + 10.70
27) Linemen, Cable Splicers, Dynamite Men	41.22	6.5% + 12.20

Project:	Pavement	Preservation	Crack	Sealing

28) Material Men, Tractor Trailer Drivers, Equipment Operators

35.04

6.5% + 10.45

Project: Pavement Preservation Crack Sealing

Welders: Rate for craft to which welding is incidental.

*Note: Hazardous waste removal work receives additional \$1.25 per hour for truck drivers.

**Note: Hazardous waste premium \$3.00 per hour over classified rate

ALL Cranes: When crane operator is operating equipment that requires a fully licensed crane operator to operate he receives an extra \$3.00 premium in addition to the hourly wage rate and benefit contributions:

- 1) Crane handling or erecting structural steel or stone; hoisting engineer (2 drums or over)
- 2) Cranes (100 ton rate capacity and over) Bauer Drill/Caisson
- 3) Cranes (under 100 ton rated capacity)

Crane with 150 ft. boom (including jib) - \$1.50 extra Crane with 200 ft. boom (including jib) - \$2.50 extra Crane with 250 ft. boom (including jib) - \$5.00 extra Crane with 300 ft. boom (including jib) - \$7.00 extra Crane with 400 ft. boom (including jib) - \$10.00 extra

All classifications that indicate a percentage of the fringe benefits must be calculated at the percentage rate times the "base hourly rate".

Apprentices duly registered under the Commissioner of Labor's regulations on "Work Training Standards for Apprenticeship and Training Programs" Section 31-51-d-1 to 12, are allowed to be paid the appropriate percentage of the prevailing journeymen hourly base and the full fringe benefit rate, providing the work site ratio shall not be less than one full-time journeyperson instructing and supervising the work of each apprentice in a specific trade.

~~Connecticut General Statute Section 31-55a: Annual Adjustments to wage rates by contractors doing state work ~~

The Prevailing wage rates applicable to this project are subject to annual adjustments each July 1st for the duration of the project.

Each contractor shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.

It is the contractor's responsibility to obtain the annual adjusted prevailing wage rate increases directly from the Department of Labor's website.

The annual adjustments will be posted on the Department of Labor's Web page: www.ct.gov/dol.

The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project.

All subsequent annual adjustments will be posted on our Web Site for contractor access.

Contracting Agencies are under no obligation pursuant to State labor law to pay any increase due to the annual adjustment provision.

Project: Pavement Preservation Crack Sealing

Effective October 1, 2005 - Public Act 05-50: any person performing the work of any mechanic, laborer, or worker shall be paid prevailing wage

All Person who perform work ON SITE must be paid prevailing wage for the appropriate mechanic, laborer, or worker classification.

All certified payrolls must list the hours worked and wages paid to All Persons who perform work ON SITE regardless of their ownership i.e.: (Owners, Corporate Officers, LLC Members, Independent Contractors, et. al)

Reporting and payment of wages is required regardless of any contractual relationship alleged to exist between the contractor and such person.

~~Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clause (29 CFR 5.5 (a) (1) (ii)).

Please direct any questions which you may have pertaining to classification of work and payment of prevailing wages to the Wage and Workplace Standards Division, telephone (860)263-6790.

- SPECIAL NOTICE -

To: All State and Political Subdivisions, Their Agents, and Contractors

Connecticut General Statute 31-55a - Annual adjustments to wage rates by contractors doing state work.

Each contractor that is awarded a contract on or after October 1, 2002, for (1) the construction of a state highway or bridge that falls under the provisions of section 31-54 of the general statutes, or (2) the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project that falls under the provisions of section 31-53 of the general statutes shall contact the Labor Commissioner on or before July first of each year, for the duration of such contract, to ascertain the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each mechanic, laborer or worker employed upon the work contracted to be done, and shall make any necessary adjustments to such prevailing rate of wages and such payment or contributions paid or payable on behalf of each such employee, effective each July first.

- The prevailing wage rates applicable to any contract or subcontract awarded on or after October 1, 2002 are subject to annual adjustments each July 1st for the duration of any project which was originally advertised for bids on or after October 1, 2002.
- Each contractor affected by the above requirement shall pay the annual adjusted prevailing wage rate that is in effect each July 1st, as posted by the Department of Labor.
- It is the *contractor's* responsibility to obtain the annual adjusted prevailing
 wage rate increases directly from the Department of Labor's Web Site. The
 annual adjustments will be posted on the Department of Labor Web page:
 www.ctdol.state.ct.us. For those without internet access, please contact the
 division listed below.
- The Department of Labor will continue to issue the initial prevailing wage rate schedule to the Contracting Agency for the project. All subsequent annual adjustments will be posted on our Web Site for contractor access.

Any questions should be directed to the Contract Compliance Unit, Wage and Workplace Standards Division, Connecticut Department of Labor, 200 Folly Brook Blvd., Wethersfield, CT 06109 at (860)263-6790.

Connecticut Department of Labor Wage and Workplace Standards Division FOOTNOTES

Please Note: If the "Benefits" listed on the schedule for the following occupations includes a letter(s) (+ a or + a+b for instance), refer to the information below.

Benefits to be paid at the appropriate prevailing wage rate for the listed occupation.

If the "Benefits" section for the occupation lists only a dollar amount, disregard the information below.

Bricklayers, Cement Masons, Cement Finishers, Concrete Finishers, Stone Masons (Building Construction) and

(Residential- Hartford, Middlesex, New Haven, New London and Tolland Counties)

a. Paid Holiday: Employees shall receive 4 hours for Christmas Eve holiday provided the employee works the regularly scheduled day before and after the holiday. Employers may schedule work on Christmas Eve and employees shall receive pay for actual hours worked in addition to holiday pay.

Elevator Constructors: Mechanics

- a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day, plus the Friday after Thanksgiving.
- b. Vacation: Employer contributes 8% of basic hourly rate for 5 years or more of service or 6% of basic hourly rate for 6 months to 5 years of service as vacation pay credit.

Glaziers

a. Paid Holidays: Labor Day and Christmas Day.

Power Equipment Operators

(Heavy and Highway Construction & Building Construction)

a. Paid Holidays: New Year's Day, Good Friday, Memorial day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day, provided the employee works 3 days during the week in which the holiday falls, if scheduled, and if scheduled, the working day before and the working day after the holiday. Holidays falling on Saturday may be observed on Saturday, or if the employer so elects, on the preceding Friday.

Ironworkers

a. Paid Holiday: Labor Day provided employee has been on the payroll for the 5 consecutive work days prior to Labor Day.

Laborers (Tunnel Construction)

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. No employee shall be eligible for holiday pay when he fails, without cause, to work the regular work day preceding the holiday or the regular work day following the holiday.

Roofers

a. Paid Holidays: July 4th, Labor Day, and Christmas Day provided the employee is employed 15 days prior to the holiday.

Sprinkler Fitters

a. Paid Holidays: Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day, provided the employee has been in the employment of a contractor 20 working days prior to any such paid holiday.

Truck Drivers

(Heavy and Highway Construction & Building Construction)

a. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas day, and Good Friday, provided the employee has at least 31 calendar days of service and works the last scheduled day before and the first scheduled day after the holiday, unless excused.

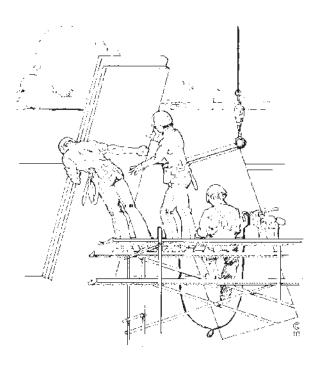
~NOTICE~

TO ALL CONTRACTING AGENCIES

Please be advised that Connecticut General Statutes Section 31-53, requires the contracting agency to certify to the Department of Labor, the total dollar amount of work to be done in connection with such public works project, regardless of whether such project consists of one or more contracts.

Please find the attached "Contracting Agency Certification Form" to be completed and returned to the Department of Labor, Wage and Workplace Standards Division, Public Contract Compliance Unit.

[∞] Inquiries can be directed to (860)263-6543.



CONNECTICUT DEPARTMENT OF LABOR WAGE AND WORKPLACE STANDARDS DIVISION CONTRACT COMPLIANCE UNIT

CONTRACTING AGENCY CERTIFICATION FORM

I,		acting in my official capacity as
	representative	title
for		, located at
con	tracting agency	address
do hereby ce	ertify that the total dol	lar amount of work to be done in connection with
		, located at
proje	ct name and number	address
shall be \$, wh	ich includes all work, regardless of whether such project
consists of o	ne or more contracts.	
	CC	ONTRACTOR INFORMATION
Name:		
Address:		
Authorized I	Representative:	
Approximate	e Starting Date:	
Approximate	e Completion Date:	
S	ignature	Date
Return To:	Connecticut Depar	
	-	e Standards Division
	Contract Complian	
	200 Folly Brook B	
	Wethersfield, CT (00109
Date Issued:		



Substitute Senate Bill No. 318

Public Act No. 14-44

AN ACT CONCERNING ELECTRONIC PREVAILING WAGE NOTICES, INFORMATION AND RECORDS.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Section 1. Section 31-53 of the 2014 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective July 1, 2015*):

- (a) Each contract for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project by the state or any of its agents, or by any political subdivision of the state or any of its agents, shall contain the following provision: "The wages paid on an hourly basis to any person performing the work of any mechanic, laborer or worker on the work herein contracted to be done and the amount of payment or contribution paid or payable on behalf of each such person to any employee welfare fund, as defined in subsection (i) of this section, shall be at a rate equal to the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed. Any contractor who is not obligated by agreement to make payment or contribution on behalf of such persons to any such employee welfare fund shall pay to each mechanic, laborer or worker as part of such person's wages the amount of payment or contribution for such person's classification on each pay day."
- (b) Any contractor or subcontractor who knowingly or wilfully employs any mechanic, laborer or worker in the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project for or on behalf of the state or any of its agents, or any political subdivision of the state or any of its agents, at a rate of wage on an hourly basis that is less than the rate customary or prevailing for the same work in the same trade or occupation in the town in which such public works project is being constructed, remodeled, refinished, refurbished, rehabilitated, altered or repaired, or who fails to pay the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, or in lieu thereof to the person, as provided by subsection (a) of this section, shall be fined not less than two thousand five hundred dollars but not more than five thousand dollars for each offense and (1) for the first violation, shall be disqualified from bidding on contracts with the state or any political subdivision until the contractor or subcontractor has made full restitution of the back wages owed to such persons and for an

additional six months thereafter, and (2) for subsequent violations, shall be disqualified from bidding on contracts with the state or any political subdivision until the contractor or subcontractor has made full restitution of the back wages owed to such persons and for not less than an additional two years thereafter. In addition, if it is found by the contracting officer representing the state or political subdivision of the state that any mechanic, laborer or worker employed by the contractor or any subcontractor directly on the site for the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid as required by this section, the state or contracting political subdivision of the state may (A) by written or electronic notice to the contractor, terminate such contractor's right to proceed with the work or such part of the work as to which there has been a failure to pay said required wages and to prosecute the work to completion by contract or otherwise, and the contractor and the contractor's sureties shall be liable to the state or the contracting political subdivision for any excess costs occasioned the state or the contracting political subdivision thereby, or (B) withhold payment of money to the contractor or subcontractor. The contracting department of the state or the political subdivision of the state shall, not later than two days after taking such action, notify the Labor Commissioner, in writing or electronically, of the name of the contractor or subcontractor, the project involved, the location of the work, the violations involved, the date the contract was terminated, and steps taken to collect the required wages.

- (c) The Labor Commissioner may make complaint to the proper prosecuting authorities for the violation of any provision of subsection (b) of this section.
- (d) For the purpose of predetermining the prevailing rate of wage on an hourly basis and the amount of payment or contributions paid or payable on behalf of each person to any employee welfare fund, as defined in subsection (i) of this section, in each town where such contract is to be performed, the Labor Commissioner shall (1) hold a hearing at any required time to determine the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of each person to any employee welfare fund, as defined in subsection (i) of this section, upon any public work within any specified area, and shall establish classifications of skilled, semiskilled and ordinary labor, or (2) adopt and use such appropriate and applicable prevailing wage rate determinations as have been made by the Secretary of Labor of the United States under the provisions of the Davis-Bacon Act, as amended.
- (e) The Labor Commissioner shall determine the prevailing rate of wages on an hourly basis and the amount of payment or contributions paid or payable on behalf of such person to any employee welfare fund, as defined in subsection (i) of this section, in each locality where any such public work is to be constructed, and the agent empowered to let such contract shall contact the Labor Commissioner, at least ten but not more than twenty days prior to the date such contracts will be advertised for bid, to ascertain the proper rate of wages and amount of employee welfare fund payments or contributions and shall include such rate of wage on an hourly basis and the amount of payment or contributions paid or payable on behalf of each person to any employee welfare fund, as defined in subsection (i) of this section, or in lieu thereof the amount to be paid directly to each person for such payment or contributions as provided in subsection (a) of this section for all classifications of labor in the proposal for

the contract. The rate of wage on an hourly basis and the amount of payment or contributions to any employee welfare fund, as defined in subsection (i) of this section, or cash in lieu thereof, as provided in subsection (a) of this section, shall, at all times, be considered as the minimum rate for the classification for which it was established. Prior to the award of any contract, purchase order, bid package or other designation subject to the provisions of this section, such agent shall certify [in writing] to the Labor Commissioner, either in writing or electronically, the total dollar amount of work to be done in connection with such public works project, regardless of whether such project consists of one or more contracts. Upon the award of any contract subject to the provisions of this section, the contractor to whom such contract is awarded shall certify, under oath, to the Labor Commissioner the pay scale to be used by such contractor and any of the contractor's subcontractors for work to be performed under such contract.

(f) Each employer subject to the provisions of this section or section 31-54 shall (1) keep, maintain and preserve such records relating to the wages and hours worked by each person performing the work of any mechanic, laborer and worker and a schedule of the occupation or work classification at which each person performing the work of any mechanic, laborer or worker on the project is employed during each work day and week in such manner and form as the Labor Commissioner establishes to assure the proper payments due to such persons or employee welfare funds under this section or section 31-54, regardless of any contractual relationship alleged to exist between the contractor and such person, provided such employer shall have the option of keeping, maintaining and preserving such records in an electronic format, and (2) submit monthly to the contracting agency by mail, electronic mail or other method accepted by such agency, a certified payroll that shall consist of a complete copy of such records accompanied by [an original] a statement signed by the employer that indicates (A) such records are correct; (B) the rate of wages paid to each person performing the work of any mechanic, laborer or worker and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as defined in subsection (i) of this section, are not less than the prevailing rate of wages and the amount of payment or contributions paid or payable on behalf of each such person to any employee welfare fund, as determined by the Labor Commissioner pursuant to subsection (d) of this section, and not less than those required by the contract to be paid; (C) the employer has complied with the provisions of this section and section 31-54; (D) each such person is covered by a workers' compensation insurance policy for the duration of such person's employment, which shall be demonstrated by submitting to the contracting agency the name of the workers' compensation insurance carrier covering each such person, the effective and expiration dates of each policy and each policy number; (E) the employer does not receive kickbacks, as defined in 41 USC 52, from any employee or employee welfare fund; and (F) pursuant to the provisions of section 53a-157a, the employer is aware that filing a certified payroll which the employer knows to be false is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years, or both. This subsection shall not be construed to prohibit a general contractor from relying on the certification of a lower tier subcontractor, provided the general contractor shall not be exempted from the provisions of section 53a-157a if the general contractor knowingly relies upon a subcontractor's false certification. Notwithstanding the provisions of section 1-210, the certified payroll shall be considered a public record and every person shall have the

right to inspect and copy such records in accordance with the provisions of section 1-212. The provisions of subsections (a) and (b) of section 31-59 and sections 31-66 and 31-69 that are not inconsistent with the provisions of this section or section 31-54 apply to this section. Failing to file a certified payroll pursuant to subdivision (2) of this subsection is a class D felony for which the employer may be fined up to five thousand dollars, imprisoned for up to five years, or both.

- (g) Any contractor who is required by the Labor Department to make any payment as a result of a subcontractor's failure to pay wages or benefits, or any subcontractor who is required by the Labor Department to make any payment as a result of a lower tier subcontractor's failure to pay wages or benefits, may bring a civil action in the Superior Court to recover no more than the damages sustained by reason of making such payment, together with costs and a reasonable attorney's fee.
- (h) The provisions of this section do not apply where the total cost of all work to be performed by all contractors and subcontractors in connection with new construction of any public works project is less than four hundred thousand dollars or where the total cost of all work to be performed by all contractors and subcontractors in connection with any remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public works project is less than one hundred thousand dollars.
- (i) As used in this section and section 31-54, "employee welfare fund" means any trust fund established by one or more employers and one or more labor organizations or one or more other third parties not affiliated with the employers to provide from moneys in the fund, whether through the purchase of insurance or annuity contracts or otherwise, benefits under an employee welfare plan; provided such term shall not include any such fund where the trustee, or all of the trustees, are subject to supervision by the Banking Commissioner of this state or any other state or the Comptroller of the Currency of the United States or the Board of Governors of the Federal Reserve System, and "benefits under an employee welfare plan" means one or more benefits or services under any plan established or maintained for persons performing the work of any mechanics, laborers or workers or their families or dependents, or for both, including, but not limited to, medical, surgical or hospital care benefits; benefits in the event of sickness, accident, disability or death; benefits in the event of unemployment, or retirement benefits.

Approved May 28, 2014

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

n accordance with Connecticut General Statutes, 31-53 Certified Payrolls with a statement of compliance hall be submitted monthly to the contracting agency. PAYROLL CERTIFICATION FOR PU WEEKLY							PAYROLL				Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109									
CONTRACTOR NAME	AND A	ADDRESS:										SUBCONTRACTOR NAME & ADDRESS				WORKER'S	S COMPENS	ATION IN	SURANCE CARRIEF	2
Landon Corporation, 15	Conn	ecticut Ave	nue, Northford, CT 06	6472								A12 Corporation					relers Insurance Company CY # #BAC8888928			
PAYROLL NUMBER					Yantic, CT 063	89					1/00									
1	9/26	0ate /09	DOT 105-296, Rou	te 82												EFFECTIVE DATE: 1/1/09 EXPIRATION DATE: 12/31/09				
PERSON/WORKER,	APPR	MALE/	WORK		O	D	AY AND I	DATE			Total ST	BASE HOURLY	TYPE OF	GROSS PAY	Т	OTAL DEDU	CTIONS		GROSS PAY FOR	
ADDRESS and SECTION		EFEMALE	CLASSIFICATION	S	M	T	W	TH	F	S	Hours	RATE	FRINGE	FOR ALL		FEDERAL	STATE		THIS PREVAILING	
	%	AND RACE*	Trade License Type & Number - OSHA	20	21	22	23	24	25	26	Total	TOTAL FRINGE BENEFIT PLAN	BENEFITS Per Hour 1 through 6	WORK PERFORMED THIS WEEK	FICA	WITH-	WITH-	LIST OTHER	RATE JOB	NET PAY
	-	-	10 Certification Number		_	HOURS	WORKED	EACH DAY	_	_	O/T Hour		(see back)		_	HOLDING	HOLDING	-		
Robert Craft 81 Maple Street Willimantic, CT 06226		M/C	Electrical Lineman E-1 1234567 Owner		8	8	8	8	8		S-TIME 40	\$ 30.75 Base Rate	2. \$ 3. \$ 2.01	\$1,582.80				P-xxxx	\$1,582.80	#123 \$ xxx.xx
			OSHA 123456								O-TIME	\$ 8.82 Cash Fringe	4. \$ 5. \$ 6. \$							\$ XXX.XX
Ronald Jones 212 Elm Street	65%	M/B	Electrical Apprentice		8	8	8	8	8		S-TIME		1. \$ 2. \$ 3. \$	\$1,464.80	xx.xx	xx.xx	xx.xx	G-xxx	\$1,464.80	#124
Norwich, CT 06360			OSHA 234567								O-TIME		4. \$ 5. \$							\$xxx.xx
Franklin T. Smith 234 Washington Rd.		M/H	Project Manager			8					S-TIME		1. \$ 2. \$ 3. \$	\$1,500.00	xx.xx	xx.xx	xx.xx	M-xx.x		#125
New London, CT 06320 SECTION B											O-TIME	\$	4. \$ 5. \$							xxx.xx
			4 10		,	+	+				S-TIME	Cash Fringe	6. \$ 1. \$ 2. \$							
											O-TIME	Base Rate	3. \$ 4. \$							
1/12/2000		AIR DECY	URED									\$ Cash Fringe	5. \$ 6. \$							
/13/2009 VWS-CP1		*IF REQU	IKED									*SEE REVERSE	SIDE					p	AGE NUMBER	1 OF 2

*FRINGE BENEFITS EXPLANATION (P):

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits provided:					
Medical or hospital care Blue Cross Pension or retirement	_ 4) Disability				
2) Pension or retirement	5) Vacation, holiday				
3) Life Insurance Utopia	6) Other (please specify)				
CERTIFIED STATE	EMENT OF COMPLIANCE				
For the week ending date of 9/26/09					
I, Robert Craft of XYZ Co	rporation , (hereafter known as				
Employer) in my capacity as Owner	(title) do hereby certify and state:				
Section A: 1. All persons employed on said project have be the week in accordance with Connecticut General hereby certify and state the following: a) The records submitted are true and accordance with Connecticut General hereby certify and state the following:					
contributions paid or payable on behalf of defined in Connecticut General Statutes of wages and the amount of payment or employee to any employee welfare fund,	nic, laborer or workman and the amount of payment or of each such employee to any employee welfare fund, as, section 31-53 (h), are not less than the prevailing rate contributions paid or payable on behalf of each such as determined by the Labor Commissioner pursuant to section 31-53 (d), and said wages and benefits are not ed by contract;				
c) The Employer has complied with all of section 31-53 (and Section 31-54 if appli	of the provisions in Connecticut General Statutes, icable for state highway construction);				
	is covered by a worker's compensation insurance it which proof of coverage has been provided to the				
gift, gratuity, thing of value, or compension indirectly, to any prime contractor, prime employee for the purpose of improperly	acks, which means any money, fee, commission, credit, ation of any kind which is provided directly or contractor employee, subcontractor, or subcontractor obtaining or rewarding favorable treatment in onnection with a prime contractor in connection with a tor; and				
	rtified payroll which he knows to be false is a class D ned up to five thousand dollars, imprisoned for up to				
training completion document to the certified agency for this project on which such employed	**				
Robert Craft 04	Submitted on (Date)				
(Signature) /	Submitted on (Date)				
listed under Section B who performed work of wage requirements defined in Connecticut Ge	ements for reporting purposes only, all employees in this project are not covered under the prevailing neral Statutes Section 31-53.				
Signature) Craft Own	File) $\frac{10/2/09}{\text{Submitted on (Date)}}$				
-					

Note: CTDOL will assume all hours worked were performed under Section A unless clearly delineated as Section B WWS-CP1 as such. Should an employee perform work under both Section A and Section B, the hours worked and wages paid must be segregated for reporting purposes.

THIS IS A PUBLIC DOCUMENT

DO NOT INCLUDE SOCIAL SECURITY NUMBERS

[New] In accordance with Section 31-53b(a) of the C.G.S. each contractor shall provide a copy of the OSHA 10 Hour Construction Safety and Health Card for each employee, to be attached to the first certified payroll on the project.

In accordance with Conn Certified Payrolls with a shall be submitted month	stateme	ent of con	npliance	_	PAYRO	OLL CE	CRTIFIC	CATIO		PUBLIC	C WORKS PI	ROJECTS	_		Connecticut Department of Labor Wage and Workplace Standards Division 200 Folly Brook Blvd. Wethersfield, CT 06109				
CONTRACTOR NAME	AND AI	ODRESS:									SUBCONTRAC	TOR NAME &	ADDRESS		WORKER'S			SURANCE CARRIER	L .
PAYROLL NUMBER	Week-F	Ending	PROJECT NAME & A	ADDRESS											POLICY #				
	Week-Ending Date PROJECT NAME & ADDRESS								EFFECTIVE DATE: EXPIRATION DATE:										
	APPR		WORK		DA	Y AND DA					BASE HOURLY	TYPE OF	GROSS PAY	TO	OTAL DEDUC			GROSS PAY FOR	
ADDRESS and SECTION	%	FEMALE AND RACE*	CLASSIFICATION Trade License Type & Number - OSHA 10 Certification Number	S	T HOURS WO		TH ACH DAY	F	S		RATE TOTAL FRINGE BENEFIT PLAN CASH	FRINGE BENEFITS Per Hour 1 through 6 (see back)	FOR ALL WORK PERFORMED THIS WEEK	FICA	FEDERAL WITH- HOLDING	WITH-	LIST OTHER	THIS PREVAILING RATE JOB	CHECK # AND NET PAY
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											\$ Base Rate \$ Cash Fringe	1. \$ 2. \$ 3. \$ 4. \$ 5. \$ 6. \$							
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12/9/2013 WWS-CP1		*IF REQU	JIKED								*SEE REVERSE	SIDE					P	AGE NUMBER	OF

*FRINGE BENEFITS EXPLANATION (P):

Bona fide benefits paid to approved plans, funds or programs, except those required by Federal or State Law (unemployment tax, worker's compensation, income taxes, etc.).

Please specify the type of benefits pr	
_	4) Disability
	5) Vacation, holiday
5) Life insurance	6) Other (please specify)
CERTIFI	IED STATEMENT OF COMPLIANCE
For the week ending date of	
I,	of, (hereafter known as
Employer) in my capacity as	(title) do hereby certify and state:
Section A:	
	roject have been paid the full weekly wages earned by them during eticut General Statutes, section 31-53, as amended. Further, I g:
a) The records submitted are	e true and accurate;
contributions paid or payable defined in Connecticut Gene of wages and the amount of person to any employee well	be each mechanic, laborer or workman and the amount of payment or e on behalf of each such person to any employee welfare fund, as eral Statutes, section 31-53 (h), are not less than the prevailing rate payment or contributions paid or payable on behalf of each such fare fund, as determined by the Labor Commissioner pursuant to eral Statutes, section 31-53 (d), and said wages and benefits are not lso be required by contract;
	lied with all of the provisions in Connecticut General Statutes, 31-54 if applicable for state highway construction);
	ered by a worker's compensation insurance policy for the duration of f of coverage has been provided to the contracting agency;
gift, gratuity, thing of value, indirectly, to any prime cont employee for the purpose of	ceeive kickbacks, which means any money, fee, commission, credit, or compensation of any kind which is provided directly or tractor, prime contractor employee, subcontractor, or subcontractor improperly obtaining or rewarding favorable treatment in attract or in connection with a prime contractor in connection with a rime contractor; and
	at filing a certified payroll which he knows to be false is a class D ver may be fined up to five thousand dollars, imprisoned for up to
- ·	ffix a copy of the construction safety course, program or the certified payroll required to be submitted to the contracting such persons name first appears.
(Signature)	(Title) Submitted on (Date)

Weekly Payroll Certification For Public Works Projects (Continued)

PAYROLL CERTIFICATION FOR PUBLIC WORKS PROJECTS

Week-Ending Date:

Contractor or Subcontractor Business Name:

WEEKLY PAYROLL

PERSON/WORKER,	APPR	MALE/	WORK			DAY	AND D	DATE			Total ST	BASE HOURLY	TYPE OF	GROSS PAY	TOTAL DE	EDUCTIONS	S	GROSS PAY FOR	
ADDRESS and SECTION	RATE	FEMALE	CLASSIFICATION	S	M	T	W	TH	F	S	Hours	RATE	FRINGE	FOR ALL WORK	FEDERAL	STATE		THIS PREVAILING	CHECK # AND
	%	AND											BENEFITS	PERFORMED				RATE JOB	NET PAY
		RACE*	Trade License Type									TOTAL FRINGE	Per Hour	THIS WEEK					
			& Number - OSHA		L			<u> </u>				BENEFIT PLAN	1 through 6				OTHER		
			10 Certification Number		НО	URS WO	RKED E	EACH DA	ΛΥ		O/T Hour		(see back)		HOLDING	HOLDING			
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		*IE DEOLI	IDED					L				Cash Fringe	6. \$						

*IF REQUIRED

12/9/2013 WWS-CP2

NOTICE: THIS PAGE MUST BE ACCOMPANIED BY A COVER PAGE (FORM # WWS-CP1)

PAGE NUMBER ____OF

Notice

To All Mason Contractors and Interested Parties Regarding Construction Pursuant to Section 31-53 of the Connecticut General Statutes (Prevailing Wage)

The Connecticut Labor Department Wage and Workplace Standards Division is empowered to enforce the prevailing wage rates on projects covered by the above referenced statute.

Over the past few years the Division has withheld enforcement of the rate in effect for workers who operate a forklift on a prevailing wage rate project due to a potential jurisdictional dispute.

The rate listed in the schedules and in our Occupational Bulletin (see enclosed) has been as follows:

Forklift Operator:

- Laborers (Group 4) Mason Tenders operates forklift solely to assist a mason to a maximum height of nine feet only.
- **Power Equipment Operator (Group 9)** operates forklift to assist any trade and to assist a mason to a height over nine feet.

The U.S. Labor Department conducted a survey of rates in Connecticut but it has not been published and the rate in effect remains as outlined in the above Occupational Bulletin.

Since this is a classification matter and not one of jurisdiction, effective January 1, 2007 the Connecticut Labor Department will enforce the rate on each schedule in accordance with our statutory authority.

Your cooperation in filing appropriate and accurate certified payrolls is appreciated.

Informational Bulletin

THE 10-HOUR OSHA CONSTRUCTION SAFETY AND HEALTH COURSE

(applicable to public building contracts entered into *on or after July 1, 2007*, where the total cost of all work to be performed is at least \$100,000)

- (1) This requirement was created by Public Act No. 06-175, which is codified in Section 31-53b of the Connecticut General Statutes (pertaining to the prevailing wage statutes);
- (2) The course is required for public building construction contracts (projects funded in whole or in part by the state or any political subdivision of the state) entered into on or after July 1, 2007;
- (3) It is required of private employees (not state or municipal employees) and apprentices who perform manual labor for a general contractor or subcontractor on a public building project where the total cost of all work to be performed is at least \$100,000;
- (4) The ten-hour construction course pertains to the ten-hour Outreach Course conducted in accordance with federal OSHA Training Institute standards, and, for telecommunications workers, a ten-hour training course conducted in accordance with federal OSHA standard, 29 CFR 1910.268;
- (5) The internet website for the federal OSHA Training Institute is http://www.osha.gov/fso/ote/training/edcenters/fact_sheet.html;
- (6) The statutory language leaves it to the contractor and its employees to determine who pays for the cost of the ten-hour Outreach Course;
- (7) Within 30 days of receiving a contract award, a general contractor must furnish proof to the Labor Commissioner that all employees and apprentices performing manual labor on the project will have completed such a course;
- (8) Proof of completion may be demonstrated through either: (a) the presentation of a *bona fide* student course completion card issued by the federal OSHA Training Institute; *or* (2) the presentation of documentation provided to an employee by a trainer certified by the Institute pending the actual issuance of the completion card;
- (9) Any card with an issuance date more than 5 years prior to the commencement date of the construction project shall not constitute proof of compliance;

- (10) Each employer shall affix a copy of the construction safety course completion card to the certified payroll submitted to the contracting agency in accordance with Conn. Gen. Stat. § 31-53(f) on which such employee's name first appears;
- (11) Any employee found to be in non-compliance shall be subject to removal from the worksite if such employee does not provide satisfactory proof of course completion to the Labor Commissioner by the fifteenth day after the date the employee is determined to be in noncompliance;
- (12) Any such employee who is determined to be in noncompliance may continue to work on a public building construction project for a maximum of fourteen consecutive calendar days while bringing his or her status into compliance;
- (13) The Labor Commissioner may make complaint to the prosecuting authorities regarding any employer or agent of the employer, or officer or agent of the corporation who files a false certified payroll with respect to the status of an employee who is performing manual labor on a public building construction project;
- (14) The statute provides the minimum standards required for the completion of a safety course by manual laborers on public construction contracts; any contractor can exceed these minimum requirements; and
- (15) Regulations clarifying the statute are currently in the regulatory process, and shall be posted on the CTDOL website as soon as they are adopted in final form.
- (16) Any questions regarding this statute may be directed to the Wage and Workplace Standards Division of the Connecticut Labor Department via the internet website of http://www.ctdol.state.ct.us/wgwkstnd/wgemenu.htm; or by telephone at (860)263-6790.

THE ABOVE INFORMATION IS PROVIDED EXCLUSIVELY AS AN EDUCATIONAL RESOURCE, AND IS NOT INTENDED AS A SUBSTITUTE FOR LEGAL INTERPRETATIONS WHICH MAY ULTMATELY ARISE CONCERNIG THE CONSTRUCTION OF THE STATUTE OR THE REGULATIONS.

SECTION I

Specifications

EXHIBIT 1

MICRO-SURFACING SPECIFICATIONS Highly Polymer Modified Asphalt (HiMA)

1. **DESCRIPTION**

Micro-surfacing is a tough and durable thin overlay material which can restore the original service properties to worn but structurally sound pavements. Its properties are based on a blend of select crushed aggregate and a sophisticated chemical formulation of asphalt cement, cationic emulsifiers, additives, and polymers. This specification covers all materials, equipment, construction and application procedures for rut filling and/or surfacing of existing paved surfaces. The micro-surfacing shall be a mixture of cationic, polymer-modified asphalt emulsion, mineral aggregate, mineral and field control additives, and water, properly proportioned, mixed and spread on the paved surface in accordance with this specification and as directed by the Engineer.

For this contract, additional micro-surfacing mixture additives shall be utilized for the purpose of improving performance and durability. These mixture additives shall include heavy polymer dosages in the emulsion (6% SBS polymer and referred to as "HiMA", or "Highly Modified Asphalt"), as determined by the Engineer, and all additives shall be homogenously blended with the other micro-surfacing components.

2. MATERIALS

2.1 Emulsified Asphalt

The emulsified asphalt shall be a quick-set, polymer-modified cationic type CSS-1H emulsion, and shall conform to the requirements specified in AASHTO M208 and ASTM 2397. It shall pass all applicable storage and settlement tests. The polymer shall be milled into the emulsion, or in the case of the HiMA (6% SBS) emulsion, may be blended into the unmodified base asphalt. The cement mixing test shall be waived for this emulsion.

2.1.1 HiMA (6% SBS) Micro-Surfacing Residue Properties

For HiMA mixtures, emulsion testing by distillation method (ASTM D5 or AASHTO T49) shall yield a Softening Point (ASTM D36 or AASHTO T53) not less than 170 degrees F.

2.2 Aggregate

2.2.1. General

The mineral aggregate used shall be of the type and grade specified for micro-surfacing. The aggregate shall be manufactured crushed stone such as granite, slag, limestone, chat, or other high quality aggregate or combination thereof.

2.2.2 Aggregate Physical Requirements

Grading - The aggregate including natural fines when tested by AASHTO methods T11 or T27 or ASTM C117 or C136, should meet the referenced gradation requirements.

Deleterious Substances - To limit the permissible amount of clay-like fines in an aggregate, a sand equivalency value of 65 or higher is required when tested by ASTM 2419.

Soundness - The aggregate shall have a weighted loss of not more than 15% when the sodium sulfate test is used, or 20% when the magnesium sulfate test is used.

Hardness - The aggregate wear, from resistance to abrasion, shall be a maximum of 35% when using AASHTO T96 or ASTM C131 test methods.

2.3 Water

The water shall be potable and shall be free of harmful soluble salts.

2.4 Modifier

Special quick-setting emulsifier agents shall be milled into the asphalt emulsion. The emulsified asphalt shall be so formulated that when the paving mixture is applied at a thickness of one inch with the relative humidity at not more than 50% and an ambient air temperature of at least 75 degrees F, the material will cure sufficiently so that rolling traffic can be allowed in one hour with no damage to the surface, as verified by the Engineer.

2.5 Additives

A mineral additive shall be introduced to the aggregate and may be any recognized brand of non-air entrained Portland cement or hydrated lime that is free of lumps, or other approved mineral additive. It may be accepted upon visual inspection. The amount of mineral additive needed shall be determined by the laboratory mix design and will be considered as part of the material gradation requirement.

A liquid field control additive may be introduced and blended with water to provide effective control of the required quick-set properties. This additive shall be made available by the chemical supplier or emulsion manufacturer, and certified to be compatible with the mixture.

3. ENGINEERING

3.1 General

Before work commences, the contractor shall submit a signed and certified mix design covering the specific material(s) to be used on the project. This design shall be performed by a qualified, independent laboratory. Once the materials are approved, no substitution will be permitted unless first tested and approved by the laboratory preparing the mix design.

3.2 Mix Design

The independent laboratory shall develop the job mix design and present certified test results for the contractor's approval. Compatibility of the aggregate and emulsion shall be verified by the mix design. The job mix formula shall meet standard ISSA A143 micro-surfacing mix design requirements. All component material used in the mix design shall be representative of the material proposed by the contractor for use on the project.

3.3 Specifications

The Engineer shall approve the design mix and all micro-surfacing materials and methods prior to use. The component materials shall be within the following limits.

Residual Asphalt - 5% to 9% by dry weight of aggregate

Mineral Additive - 0.5% to 3% by dry weight of aggregate

Polymer Modifier and Field Control Additive – As required to provide specified properties

Water - As required to produce consistency

Aggregate - Recommended Gradations:

	Type II	Type III
Screen Size	% Passing	% Passing

3/8"	100	100
#4	90-100	70-90
#8	65-90	45-70
#16	45-70	28-50
#30	30-50	19-34
#50	18-30	12-25
#100	10-21	7-18
#200	5-15	5-15

Suggested Application Rates:

Type II - Urban and Residential Streets and Airport Runways

- single course = 18-20 lbs./s.y.
- cape seal wear course = 25-28 lbs./s.y.
- double course = 28-32 lbs./s.y.

Type III - Interstate Routes

- double course = 30-36 lbs./s.y.
- wheel ruts = as required

Note: all application rates above are dry aggregate weights exclusive of emulsion and all other additives.

4. EQUIPMENT

4.1 General

All equipment, tools, and machines used in the performance of this work shall be maintained in satisfactory working condition at all times to ensure a high quality product.

4.2 Mixing Equipment

The material shall be mixed by a self-propelled micro-surfacing mixing machine which shall be a continuous flow, continuous run mixing unit able to accurately deliver and proportion the aggregate, emulsified asphalt, mineral and field control additives, and water to a revolving multiblade twin shafted mixer, and discharge the mixed product on a continuous flow basis. The contractor shall own and have available two (2) continuous flow, continuous run mixing machines to ensure highest quality, and to mitigate the effect of equipment breakdowns. The machines shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral and

field control additives, and water to maintain an adequate supply to the proportioning controls. The machines shall be equipped with self-loading devices which provide for the loading of materials while continuing to lay micro-surfacing, thereby minimizing construction joints.

4.3 Proportioning Devices

Individual volume or weight controls for proportioning each material to be added to the mix, i.e., aggregate, emulsified asphalt, mineral and field control additives, and water shall be provided and properly marked. These proportioning devices are usually revolution counters or similar devices, and are used in material calibration and determining the materials output at any time.

4.4 Emulsion Pump

The emulsion pump shall be a heated, positive displacement type pump.

4.5 Spreading Equipment

The surfacing mixture shall be spread uniformly by means of a mechanical type spreader box attached to the mixer, equipped with paddles to agitate and spread the materials throughout the box. The spreader box width shall be capable of adjustment while paving in order to accommodate the changing width of some roadways without excessive overlaps. A front seal shall be provided to insure no loss of the mixture at the road contact point. The rear seal and secondary strike-off shall act as the final strike-off, and both shall be adjustable. The mixture shall be spread to fill cracks and minor surface irregularities, and leave a uniform skid resistant application of material on the surface. The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike-off. The longitudinal joint where two passes join shall be neat in appearance, uniform and lapped. All excess material shall be removed from the jobsite prior to opening the road. The spreader box shall have suitable means provided to side-shift the box to compensate for variations in pavement width and longitudinal alignment. A rut box shall be available to pre-fill wheel ruts when necessary prior to overlay to eliminate puddles or runoff interruption. The rut box shall be no less than 4' wide and no more than 6' wide.

4.6 Auxiliary Equipment

Suitable surface cleaning equipment, traffic control equipment, hand tools and any support equipment shall be provided as necessary to perform the work.

4.7 Screening Plant

All aggregate shall be rescreened immediately prior to being loaded onto micro-surfacing equipment. The screening plant shall be equipped with a 3/8" screen to remove all oversized aggregate, and shall be capable of discharging screened aggregate directly onto the support equipment. Any material discharged onto the ground must be rescreened prior to use.

5. MACHINE CALIBRATION

Each mixing unit to be used in the performance of the work shall be calibrated in the presence of the Engineer prior to construction, or previous calibration documentation covering the exact materials to be used may be acceptable provided they were made during the same calendar year. The documentation shall include the individual calibration of each material at various settings, which can be related to the machine metering devices.

6. WEATHER LIMITATIONS

The material shall be spread only when the road surface and atmospheric temperatures are at least 45 degrees F and rising, the weather is not rainy, and there is no forecast of temperatures below 32 degrees F within 48 hours from the time of placement of the mixture.

7. NOTIFICATION AND TRAFFIC CONTROL

7.1 Notification

All homeowners and businesses affected by the construction shall be notified a minimum of one day in advance of the surfacing. This notification shall be in the form of "no parking" signs.

7.2 Traffic Control

Suitable methods shall be used by the contractor to protect the micro-surface from traffic until the new surface will support traffic without damage. All traffic control methods used shall be in accordance with the Engineer's specifications and shall be employed in a safe manner. The cost of flaggers and any police details, if required, will be paid or reimbursed by the Owner.

8. SURFACE PREPARATION

8.1 General

The area to be resurfaced shall be thoroughly cleaned of vegetation, loose aggregate and soil, particularly soil that is bound to the surface. Manholes, valve boxes and other service entrances will be protected from the surfacing material with polyethylene sheeting. All services will be uncovered upon completion of work.

8.2 Cracks in Surface

If required by the Engineer, separate bid items will be provided to pre-treat the cracks in the surface with a fiberized crack sealer prior to the application of the micro-surfacing. Crack sealer shall be either PG 64-22 asphalt cement with not less than 5% polyester reinforcing fibers (PG + fibers), or a polymer and crumb rubber modified asphalt cement including not less than 3% polymers, 7% recycled tire crumb rubber (80 mesh), and 8% polyester fibers (PCRM + fibers).

The modified asphalt cement incorporated in the PCRM + fibers material must meet PG 64-28E MSCR testing requirements. The sealant selected will be at the Engineer's discretion.

8.3 Tack Coat

The contractor shall be required to apply a tack coat on any heavily oxidized pavements, and on high traffic roadways as directed by the Engineer. The tack coat shall consist of one part emulsified asphalt (CSS-1H) and three parts water, and be applied with a distributor at a rate of 0.05-0.10 gallons per square yard. If tack coat is to be required the Bid Proposal form shall pay item to furnish and install it.

9. STOCKPILE

Precautions shall be taken to insure that aggregate stockpiles do not become contaminated. The mineral aggregate shall be re-screened prior to being directly loaded onto micro-surfacing equipment.

10. APPLICATION

10.1 General

The surface should be pre-wetted by fogging ahead of the spreader box when required by surface and ambient conditions. The rate of application of the fog spray shall be adjusted during the day to suit temperatures, surface texture, humidity, and dryness of the pavement surface.

The micro-surfacing mixture shall be of the desired consistency upon leaving the mixer and no additional materials should be added. A sufficient amount of material shall be carried in all parts of the spreader at all times so that a complete coverage is obtained. Overloading of the spreader shall be avoided. No lumping, balling, or unmixed aggregate shall be permitted.

No streaks, such as those caused by oversized aggregate, will be left in the finished surface. If excessive amounts of oversized aggregates appear in the mix, the job will be stopped until the contractor proves to the Engineer that the situation has been corrected.

10.2 Joints

No excessive buildup, uncovered areas or unsightly appearances shall be permitted on longitudinal or transverse joints. The contractor shall provide suitable width spreading equipment to produce a minimum number of longitudinal joints throughout the project. When possible, longitudinal joints shall be placed on lane lines. Half passes and odd width passes will be used only in minimum amounts. If half passes are used, they shall not be the last pass of any paved areas.

10.3 Mix Stability

The micro-surfacing mixture shall possess sufficient stability so that premature breaking of the material in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. It shall be free of excess water or emulsion, and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

10.4 Hand Work

Areas which cannot be reached with the mixing machine shall be surfaced using hand squeegees to provide complete and uniform coverage. The area to be hand-worked shall be lightly dampened prior to mix placement. Care shall be exercised to leave no unsightly appearance from handwork.

The same type finish as applied by the spreader box shall be required. Handwork shall be completed immediately after the micro-surfacing mixture is discharged from the spreader box.

10.5 Lines

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a neat workmanship appearance.

10.6 Rolling

If required by the Engineer, specified areas shall be rolled by a self-propelled, 5 to 10 ton pneumatic roller with a tire pressure of 50 PSI and equipped with a water spray system, and a separate bid item for rolling will be included in the Bid Proposal form.

11. QUALITY CONTROL

11.1 Materials

The contractor will permit the Engineer to take samples of the aggregate and asphalt emulsion to be used in the project at the Engineer's discretion. Gradation and sand equivalency tests may be run on the aggregate, and residual asphalt content test run on the emulsion. Test results will be compared to specifications. Tests will be run by a qualified laboratory at the expense of the Owner. The Owner must notify the contractor immediately if any test fails to meet the specifications.

11.2 Micro-Surfacing Mixture

Samples of the mixture should be taken daily and may be taken directly from the mixing unit(s). Consistency and residual asphalt content tests may be made on the samples and compared to the specifications. Tests will be run by a qualified laboratory at the expense of the Owner. The Owner must notify the contractor immediately if any test fails to meet specifications.

The Engineer may use the recorder and measuring facilities of the unit to determine application rates, asphalt emulsion content, mineral and field control additives, and water.

11.3 Non-Compliance

If any two successive tests fail on the stockpile material, the job shall be stopped. It is the responsibility of the contractor, at his own expense, to prove to the Engineer that the conditions have been corrected. If any two successive tests on the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the contractor, at his own expense, to prove to the Engineer that the problems have been corrected and that the machine is working properly.

12. PERFORMANCE

It is the intention of this Public Agency not to award a contract for Micro-Surfacing work under this or any other proposal if the bidder cannot furnish satisfactory evidence that he has the ability and experience to perform this class of work, and that he has sufficient capital and equipment to enable him to prosecute the work successfully, and to complete it within the time named in the contract. The Public Agency also reserves the right to reject this or any other proposal, or to award the contract as is deemed to be in the best interest of said Public Agency.

12.1 Proof of Experience

To illustrate its experience and capabilities to perform micro-surfacing work, bidder shall provide with his bid a list of similar projects completed within the last 3 years. Such list shall include the project names and locations, owner or agency contact names and telephone numbers, and the total area of work completed for each project. The total area of work for all projects on this list shall not be less than 20,000 tons. In addition to experience with conventional microsurfacing, the bidder must also be able to demonstrate experience applying the highly modified asphalt (HiMA 6% SBS polymer) variation of micro-surfacing, and such experience shall be noted on the above required list of similar recent projects including the contact information for each project.

12.2 State DOT Prequalification

To further ensure the contractor's capabilities, the bidder shall provide with his bid evidence of his current prequalification status by the State DOT for the categories of work contained herein.

13. PERFORMANCE WARRANTY

The contractor must furnish the following warranty after completion of the work and prior to final payment:

The Contractor hereby warrants that all workmanship and all materials furnished under this contract comply fully with requirements of these Micro-Surfacing Specifications. If at any time

within two years after the date of the final inspection, any unfaithful or defective work should appear which in the opinion of the Owner is due to inferior materials or workmanship, the Contractor warrants to do whatever is necessary to remedy the defects immediately without cost to the Owner. The Owner will notify the Contractor in writing of the defects and the repairs to be made, and the Contractor will begin repairs within a mutually agreed time frame.

14. METHOD OF AWARD

To ensure contractor accountability, the owner intends to award all items to a single contractor. Accordingly, contractors must bid on all items of work, and the low bidder will be the contractor whose total bid price is the lowest. The bid quantities are not guaranteed, and their primary purpose is for the determination of the low bidder.

15. MEASUREMENT AND PAYMENT

The quantity to be measured for payment will be the number of tons of micro-surfacing actually completed, and this quantity shall be determined and verified daily utilizing the revolution counters affixed to the calibrated equipment. The accepted quantity of micro-surfacing will be paid for at the contract unit price per ton of the type specified in the proposal, which shall be full compensation for furnishing, transporting, handling and placing the material specified and furnishing of all labor, tools, equipment and incidentals for the satisfactory completion of this item. Tack coat and crack sealing (if required) will be paid for by the gallon of material applied as determined and approved daily by the Engineer.

15.1 Asphalt Price Adjustments

Contractor's bid prices below shall be based upon the current State DOT asphalt cement index posted exactly two (2) weeks prior to the due date for receipt of bids ("Bid Index"). If the posted State DOT asphalt cement index in place when the work is performed differs by more than 5% from the Bid Index, then Contractor's invoices shall include price adjustments for the asphaltic materials (micro-surfacing, crack sealing, and tack coat), and such adjustments shall be proportionate to the mix design asphalt content (%) of each of these materials.

15.2 Future Year Price Adjustments

The owner agency reserves itself the option to extend the use, terms, conditions and prices of this bid for an additional three (3) years after the first year in which the contract is awarded. Such extension will be subject to the Owner reviewing and approving the Contractor's annual request for a price adjustment based on and limited to the prior year's actual rate of inflation. If such price adjustment cannot be mutually agreed upon between the Owner and Contractor, Owner may choose to re-bid the work in lieu of extending this contract.

EXHIBIT 2

RANDOM CRACK SEALING BY POLYESTER REINFORCED ASPHALT METHOD

1. Scope of Work

The work covered by this section of the specification consists of furnishing all plant, labor equipment and materials necessary to perform all operations in connection with the cleaning and sealing of construction and random cracks in bituminous concrete pavements, including vegetation removal.

2. Material

Crack Sealer shall be an asphalt-fiber compound designed especially for improving strength and performance of the parent asphalt sealant.

- (a) Asphalt sealant shall be PG64-22 binder with a penetration of 75-100.
- (b) Fiber reinforcing materials shall be short-length polyester fiber having the following properties.

Length	7mm
Diameter	0.0008 inch plus or minus .0001 inch
Specific Gravity	1.32 to 1.40
Melt Temperature	480 degrees F. minimum
Ignition Temperature	1000 degrees F. minimum
Tensile Strength	75000 PSI plus or minus 5000 PSI
Break Elongation	33% plus or minus 9% they are fully drawn

Asphalt-fiber compound shall be mixed at a rate of 5-8% fiber weight to weight of asphalt cement. This compound having the same chemical base provides compatibility and excellent bond strengths. The fiber function is to redistribute high stress and strain concentrations that are imposed on the sealant by thermal sources, traffic loading, etc.

3. Equipment

Equipment used in the performance of the work required by this section of the specification shall be subject to the engineer and maintained in a satisfactory working condition at all times.

- (a) Air Compressor: Air compressor shall be capable of furnishing not less than 150 cubic feet of air per minute at not less than 90 lbs. per square inch pressure at the nozzle. The compressor shall be equipped with traps that will maintain the compressed air free of oil and water.
- (b) Hand tools shall consist of brooms, shovels, metal bars with chisel shaped ends, and any other tools which may be satisfactorily used to accomplish this work.

- (c) Melting Kettle & Extruder: The unit used to melt the joint sealing compound shall be double boiler, indirect fired type. The space between the inner and outer shell shall be filled with a suitable heat transfer oil or substitute having a flash point of not less than 600 degrees F. The kettle shall be equipped with a satisfactory means of agitating the sealant and stirring with mechanically operated paddles and/or by a continuous circulating gear pump attached to the thermostatic control calibrated between 200 degrees F. and 550 degrees F.
- (d) Air wands with operator shall be incorporated with 150 cubic foot compressor to clean cracks immediately before filling with polyester reinforced asphalt material.
- (e) Extruder shall be able to fill cracks with two wands. Each wand shall have removable heads so that variable width over-band from 2 to 4 inches may be installed.
- (f) All equipment shall be truck mounted and capable of extruding six thousand pounds per day.

4. <u>Preparation of cracks</u>

- (a) Debris removal: All cracks shall be blown clean by high pressure air. All old material and other debris removed from the cracks shall be removed from pavement surface immediately by means of power sweepers or hand brooms or air brooms.
- (b) Vegetation: When cracks show evidence of vegetation, it shall be removed and sterilized by use of propane torch unit eliminating all vegetation, dirt, moisture and seeds.
- (c) General: No crack sealing material shall be applied in wet cracks or where frost, snow or ice is present nor when ambient temperature is below 35 degrees F.

5. Preparation and placement of sealer

Joint sealing material shall be heated and applied at a temperature specified by the manufacturer and approved by their engineer. Minimum application temperature shall be 290 degrees F.

Sealer shall be delivered to the pavement surface through a pressure hose line and applicator shoe. The shoe width and sealer over banding area shall vary from 2" - 4" dependent on severity of cracks. When traffic requires immediate use of the roadway, a boiler slag aggregate shall be broadcast over cracks to prevent sealer pickup.

6. Workmanship

All workmanship shall be of the highest quality, and excess or spilled sealer shall be removed from the pavement by approved methods and discarded. Any workmanship determined to be below the high standards of the particular craft involved will not be accepted, and will be corrected and/or replaced as required by the engineer in charge.

7. Performance

It is the intention of the Public Agency not to award a contract for this work under this or any other proposal if the bidder cannot furnish satisfactory evidence that he has the ability and experience to perform this class of work and that he has sufficient capital and equipment to enable him to prosecute the work successfully and to complete it within the time named in the contract. The Contractor must submit with his bid proposal a list of six (6) jobs which he has successfully completed, giving the name, address, phone number, and contact person, of these projects so they can be investigated prior to the award of the contract.

Manufacturer's certificate of material compliance will be furnished to the Owner certifying conformance to the above material specifications.

Bidder must own, operate, and supply from a regional approved Department of Transportation facility.

8. <u>Measurement of payment</u>

Measurement for this bid unit shall be by the pound and shall be the actual number of pounds of polyester asphalt material applied to the pavement. Payment shall be a the unit price bid in the proposal and shall be complete payment for the entire item including furnishing, preparation and placing of materials including labor and equipment to be used on this project. Daily certified scale tickets will be provided to the owner documenting the number of pounds applied. The owner reserves the right to verify product weight twice daily using locally available certified truck scales, the cost of which shall be borne by the bidder. (Pounds only)

9. Traffic Control

Flagmen and all necessary signage and neighborhood notification of intended work shall be the responsibility of the Borough of Naugatuck DPW.

EXHIBIT 3

RANDOM CRACK SEALING – POLYMER & CRUMB RUBBER MODIFIED ASPHALT COMPOUND WITH REINFORCING FIBERS

1. SCOPE OF WORK

The work covered by this section of the specification consists of furnishing all plant, labor, equipment and materials necessary to perform all operations in connection with the cleaning and sealing of construction and random cracks in bituminous concrete pavements, including vegetation removal and sterilization of cracks, where necessary.

2. MATERIAL

Crack sealant shall be a modified asphalt-fiber compound designed specifically for improving the strength and performance of the parent asphalt sealant.

- (a) The asphalt binder shall consist of a blend of neat asphalt binder, chemically modified crumb rubber (CMCR), and a polymer package, all of which meet the following specifications:
 - The binder will meet PG 64-28E requirements after modification including:
 - o PG grade requirements of AASHTO M320
 - o Requirements of AASHTO TP70/MP19
 - Modification, at a minimum, shall consist of 7% crumb rubber, and the maximum particle size for the recycled tire rubber shall be 80 mesh (#80 sieve)
 - The asphalt supplier shall provide testing for both the neat and modified asphalt binders
 - See below for typical modified test results for 64-28E with crumb rubber:

DSR ORIGINAL

• $kPa > 1.00 @ 64^{\circ} C$. Fail temp = $76 + {\circ} C$

DSR RTFO

• $kPa > 2.20 @ 64^{\circ} C$. Fail temp = $76 + {\circ} C$

MSCR

- JNR (MSCR unit of measure): 3.2 E < 0.5% @ 64° C
- R3200 (Average % Recovery): >70%

DSR PAV

• kPa <6000 @ 64° C

BBR

- Stiffness <300 @ -18° C. M-Value >0.300 @ -18° C
- (b) Fiber reinforcing materials shall be short-length polyester fibers having the following properties:

Length* 0.25 in. \pm 0.02 in. Elongation at Break (ASTM D2256-90) 35% \pm 3% Melting Point (ASTM D3418-82) >475 degrees F (246 degrees C) Crimps/Inch (ASTM D3937-90) None

Cross Section Round
Denier (ASTM D1577-90) 4.5 Nominal dpf
Tensile Strength (ASTM D2256-90) >70,000 psi
Diameter 0.0008 in. **
Specific Gravity (ASTM D792-91) 1.32 to 1.40

The modified asphalt-fiber compound shall be mixed at a rate of 8% fiber weight to weight of asphalt cement. This compound having the same chemical base provides compatibility and exhibits excellent bond strengths. The fiber functions to re-distribute high stress and strain concentrations that are imposed on the sealant by thermal sources, traffic loading, etc.

3. EQUIPMENT

Equipment used in the performance of the work required by this section of the specification shall be subject to approval by the Owner, and maintained in a satisfactory working condition at all times.

- (a) Air Compressor: Air compressors shall be capable of furnishing not less than 100 cubic feet of air
- per minute at not less than 90 lbs. per square inch pressure at the nozzle. The compressor shall be equipped with traps that will maintain the compressed air free of oil and water.
- (b) Manually operated, gas powered air-broom or self-propelled sweeper designed especially for use in cleaning highway and airfield pavements shall be used to remove debris, dirt and dust from the cracks.
- (c) Melter: The unit used to melt or maintain the crack sealant compound at the recommended application temperature shall be the indirect fired type. It shall be equipped with a remote heat exchanger and hot oil circulation pump capable of maintaining a consistent temperature of the heat transfer oil. The heat transfer oil shall be circulated to all sides and the bottom of the vat containing the crack sealant compound making a continuous loop back to the heat exchanger and having a flash point of not less than 600 degrees F. The melter shall be equipped with a satisfactory means of agitating the crack sealant at all times. This may be accomplished by continuous stirring with mechanically operated paddles and/or by a circulating gear pump attached to the melter. The melter must be equipped with a thermostatic control calibrated between 200 degrees F and 550 degrees F, and must be capable of pumping an 8% fiber content blend.

4. PREPARATION OF CRACKS

- (a) Debris and Vegetation Removal: All cracks shall be blown clean and sterilized by use of a propane air torch generating 2,000 degrees F and 3,000 feet/second velocity to eliminate all vegetation, dirt, moisture and seeds. All debris removed from the cracks shall be removed from the pavement surface immediately by means of a power sweeper, hand or air broom.
- (b) General: No crack sealant material shall be applied in wet cracks or where frost, snow or ice is present, nor when the ambient temperature is below 25 degrees F.

5. PREPARATION AND PLACEMENT OF SEALANT

(a) The asphalt-fiber compound shall be thoroughly mixed for a minimum of one hour before application can begin. To ensure a uniform fiber distribution in the sealant, and also to limit

^{*} At temperatures ranging from ambient to maximum finished product mix temperature

^{**} Subject to Normal Variations

fluctuations in the application temperature of the blended material, the contractor must have a full melter kettle of sealant mixed, heated to the proper application temperature, and ready for testing at the start of each work day. Once that batch of sealant is emptied from the melter kettle, crack sealing operations will cease for the remainder of the day. No new materials will be allowed to be added to the melter kettle during the work day under any circumstances. Minimum application temperature shall be 320 degrees F.

(b) Sealant shall be delivered to the pavement cracks through a high pressure hose line and applicator shoe. Diameter of the applicator shoe is not to exceed 3.5 inches. Once the pavement cracks are sealed, the width of the sealant on the pavement (overbanding) shall be no greater than 3 inches. When traffic requires immediate use of the roadway, a boiler slag aggregate shall be broadcast over the cracks to prevent the sealant from being picked up.

6. WORKMANSHIP

All workmanship shall be of the highest quality, and any excess of spilled sealant shall be removed from the pavement by approved methods and discarded. Any workmanship determined to be below the high standards of the particular craft involved will not be accepted, and will be corrected and/or replaced as required by the Owner.

7. PERFORMANCE

- (a) It is the intention of the Owner not to award a contract for this work under this or any other proposal if the bidder cannot furnish satisfactory evidence that he has the ability and experience to perform this class of work, and that he has sufficient capital and equipment to enable him to prosecute the work successfully and to complete it within the time named in the contract. The Owner reserves the right to reject this or any other proposal, or to award the contract as is deemed to be in the best interest of said Owner
- (b) Properly formulated and mixed asphalt fiber compound overbanding shall not be greater than three inches (3") in width. Penalties will be imposed upon the contractor for overbanding beyond three inches (3").
- (c) The contractor must submit the following with his bid proposal:
 - A list of six (6) jobs which he has successfully completed with the polymer and crumb rubber modified asphalt compound with reinforcing fibers specified herein, giving the name and address of these projects so they can be investigated prior to the award of the contract.
 - The trade name of the crack sealant the bidder intends to use.
 - The manufacturer of the crack sealant the bidder intends to use.
- (d) The Owner will require the contractor to successfully perform a 200 foot test strip in the field prior to commencing work under the contract.
- (e) Manufacturer's certificate of material compliance will be furnished to the Owner certifying conformance to the above material specifications, including the following:
 - Performance Grade of Unmodified Asphalt: **PG 64-28S** (standard)
 - AASHTO M-320, Table 1

- 7% chemically-modified crumb rubber (CMCR)
 - o Composed of 100% 80-mesh recycled tire rubber
- 3-4% specially formulated polymer package
- Performance Grade of Modified Asphalt: <u>PG 64-28E</u> (able to withstand "extremely heavy" traffic loads)
- AASHTO M-320, Table 1
 - o "E" Jnr 3.2 kPa @ 64°C: <**0.5%**
 - o R3200 (Average % Recovery) @ 3.200 kPa: >70%
- 8% polyester reinforcing fibers
- (f) Time is of the essence in the completion of this work in order to minimize disruption to the traveling public, and to reduce the Owner's cost for police details and inspections of the work in progress. Accordingly, bidders shall submit with their bid the volumetric capacity (in gallons) of the melter kettle proposed to perform the work, together with a statement regarding their average anticipated daily production rate or range of gallons per day of material expected to be applied. The Owner reserves the right to consider its costs for traffic control and inspections in addition to contractor's bid prices to determine the proposal with lowest overall costs.

8. MEASUREMENT AND PAYMENT

- (a) The unit of measure for the work may be any of the following:
 - o Gallon
 - o Pound
 - Linear Foot
 - o Square Yard
 - o Day
 - o Lump Sum

The unit of measure will be determined by the awarding authority and set forth in the bid documents. Payment shall be at the unit price bid in the proposal and shall be full compensation for furnishing, preparing, placing the material specified and furnishing of all labor, equipment and incidentals for the satisfactory completion of this item.

EXHIBIT 4

Chip Seal—20% Rubber SPECIFICATIONS

General:

The Contractor shall furnish all tools, labor, materials, equipment, traffic control, construction signs, speed/road condition advisory signs and incidentals necessary to perform all work outlined in the bid.

The Borough reserves the right to **eliminate** from the Contract any the above items of work or **cancel** the Contract in the event it deems to be in the best interest of the Town.

The application dates shall be selected between June 1 and September 30 of each year.

All materials will conform to the State of Connecticut and the Borough standards.

LIQUID ASPHALT MEASUREMENT:

The material shall be measured by weight and converted to gallons. Material delivery slips shall be collected and totaled daily to monitor gallons placed.

PRICE ESCALATIONS:

To compensate for liquid asphalt price fluctuations, the following procedures hereby made a part of this contract to determine the actual cost to be paid per square yard of chipseal in place.

The price adjustment will be based on the variance in price for asphalt cement component only from the Base Price to the Period Price. It shall not include transportation or other charges. The Period Price will be determined by the weekly report from the Asphalt Weekly Monitor furnished by Poten & Partners, Inc. under the "East Coast Market – New England, New Haven, Connecticut area, F.O.B.

manufacturer's terminal. The Asphalt price is available on the Department of Transportation web site at: http://www.ct.gov/dot/asphaltadjustment. The website is updated weekly on Wednesdays. The base price will be based on \$450.00 per ton

The price adjustment, as herein provided, upwards or downwards, will be made on each date the work is performed based on the difference between the Period Price and the Base Price for that day for liquid asphalt cement.

The Contractor will prepare invoices by providing the square yard cost based on the amount of gallons of emulsion applied for the day, demonstrating the square yard price adjustment, increase or decrease (+/-), and separate of the square yard bid price. For basis of payment adjustments, use the following calculation:

Period Price – Base Price = \$(x), divided by 235 (gallons of AC per ton) x .8 (asphalt content minus rubber) x .60 (application rate of asphalt) = \$(x) sq. yd.

The Contractor will include the date of the Period Price posted for the day that is invoiced for verification purposes.

ASPHALT BINDER:

Asphalt Binder for the (20%) asphalt–rubber mixture shall be PG 58-28 or PG 64-28, complying with the requirements of appropriate state or local specifications. The grade selected shall be based on laboratory testing by the asphalt-rubber supplier.

ANTI-STRIPPING AGENT:

If required by the job-mix formula to produce appropriate water resistance, an anti-stripping agent that is heat stable and approved for use by the manufacturer shall be incorporated into the asphaltrubber material at the dosage required by the job-mix formula (up to 1.0% by weight of asphalt). It shall be added to the asphalt binder prior to blending with the granulated rubber.

RUBBER:

The granulated rubber shall be vulcanized rubber from the ambient temperature processing of scrap, pneumatic tires. The granulated rubber shall meet the following gradations: No substitutions will be accepted.

Sieve Size	% Passing
#10	100
#16	90 - 100
#30	25 - 75
#80	0 - 25

The use of rubber of multiple types from multiple sources is acceptable provided that the overall blend of rubber meets the gradation requirements. The length of the individual rubber particles shall not exceed 1/8". The rubber shall be accepted by certification from the rubber supplier.

AGGREGATE:

The Aggregate shall be 3/8" and conform to the requirement of appropriate state or local specifications for crushed stone. Crushed gravel stone will not be permitted. Percentage of wear as determined by the Los Angeles Abrasion Test (AASHTO-T96) shall be a maximum of 30. The aggregate shall be pre-heated to a temperature between 200° F and 300° F, and be pre-coated with 0.4% to 0.8% (by weight of aggregate) of PG 58-28 or PG 64-28 AC-20 asphalt binder prior to application. These results shall conform to the grading specified in this section. The final shape of the stone shall be approved by the Borough before shipment will begin.

Fine Aggregate Grading	% Passing – Nominal Size
Passing Sieve Size	<u>3/8"</u>
5/8"	100 %
1/2"	100%
3/8"	80–100%
#4	0 - 25%
#8	0 - 5%
#50	0 - 2%
#200	0 - 2%

The Contractor shall also make sure stone is free of dirt, clay and dust.

MATERIALS TESTING:

A minimum of 30 days prior to construction the contractor shall send a representative sample of the asphalt binder and the aggregate proposed for use to the asphalt – rubber supplier for testing. Testing for stripping and asphalt content to determine and assure that the appropriate characteristics are achieved when blended with the granulated rubber will be performed.

ASPHALT-RUBBER MIXING AND REACTION

The percent of rubber shall be 20 + -3% as indicated by the mixture design for specific project requirements by weight of total mixture, that is, by total weight of asphalt binder, plus granulated rubber. The exact granulated rubber content shall be determined by the mix design submitted by the asphalt-rubber supplier based on laboratory testing.

The temperature of the asphalt shall be between 350°F and 425°F, at the time of addition of the granulated reclaimed rubber. The asphalt and rubber shall be combined and mixed together in a blender unit and reacted in the distributor for a period of time as required by the mix design. The temperature of the asphalt-rubber mixture shall be above 325°F, during the reaction period.

JOB DELAYS:

When a job delay occurs after full reaction, the asphalt-rubber may be allowed to cool. The asphaltrubber shall be reheated slowly just prior to application, but not to a temperature exceeding 375°F. An additional quantity of granulated rubber or additive not exceeding 3% by volume of the hot asphalt- rubber mixture may be added after reheating.

VISCOSITY:

Viscosities shall be run, by the asphalt-rubber supplier, on each blended load of asphalt-rubber using a Haake-type field viscometer. The viscosity of the final product shall be in the range of 1,000 to 3,500 centipoise.

MECHANICAL BLENDER:

A mechanical blender for proper proportioning and thorough mixing of the asphalt-cement and granulated rubber is required. This unit shall be equipped with: an asphalt totaling meter (liters or gallons per minute); a positive displacement auger to feed the rubber properly to mixing chamber at specified rate; and static motionless mixer. Blender will have a separate asphalt binder feed pump and finished product pump to maximize production. Blender shall be capable of providing 100% proportional mix at any given time during the blending cycle and documentation from the manufacturer, supporting this, shall be submitted to the awarding authority if requested.

ASPHALT DISTRIBUTOR:

On projects exceeding 35 tons, of liquid asphalt rubber, at least two pressure-type bituminous distributor trucks in good condition will be required. The distributor shall be equipped with an internal heating device capable of heating the material evenly up to 425°F; an internal mixing unit capable of maintaining a proper mixture of asphalt cement and granulated rubber; have adequate pump capacity to maintain a high rate of circulation in the tank and to spray the asphalt-rubber at a viscosity of 1,000 to 3,500 centipoise; have adequate pressure devices and suitable manifolds to provide constant positive cut-off to prevent dripping from nozzles. Distributor shall be equipped with an electronically controlled computerized compensation unit for controlling application rates at various width and speed changes. The application unit shall have electronic controls and a digital read out installed and operated from the inside of the cab of the distributor. The distribution bar on the distributor shall be fully circulating. Any distributor that produces a streaked or irregular distribution of the material shall be promptly repaired or removed from the project.

Distributor equipment shall include a tachometer, pressure gauges, volume measuring devices, and a thermometer for reading temperature of tank contents. Controls for spray bar shall be located in cab of truck, for controlling width and rate of spray of product. It shall be so constructed that uniform applications may be made at the specified rate per square yard with a tolerance of plus or minus 0.05 gallon per square yard

A "bootman" shall accompany the distributor and ride in a position so that all spray bar nozzles are in his full view and readily accessible for unplugging.

AGGREGATE CHIPSPREADER:

The aggregate spreader shall be hydrostatically driven and self propelled. It must be equipped with a hydraulically controlled variable adjustable head that is capable of spreading stone in widths from 4.5 to 18 feet. The spreader shall be mounted on pneumatic tires, and shall apply the stone on the road surface in a manner that ensures that the tires do not contact the road surface until after the stone has been applied. The unit shall be equipped with an electronic radar type sensor used to measure ground speed and will automatically adjust the stone application rate depending on width of application and the speed of the chip spreader. It shall have the ability to apply stone on any grade from 0-6%. The spreader shall be equipped with an integral hopper

with a minimum capacity of 5 tons, of stone which shall be filled by trucks in a manner which ensures that the truck tires never come in contact with asphalt treated road surfaces until the stone has been properly applied. To maintain constant stone application, a self-locking truck hitch will permit towing of aggregate trucks without stopping the chip spreader. It will be capable of maintaining positive engagement over irregular terrain.

HAULING EQUIPMENT:

Trucks for hauling cover material shall be rear discharge conveyor-fed or "live bottom" trucks and shall be equipped with a device to lock onto the hitch at the rear of the chip spreader to prevent aggregate spillage.

Sufficient hauling vehicles will be available to ensure continuous operation of the distributor and chip spreader.

Operators of all trucks requiring CDL licensing shall be enrolled in a FHWA approved Drug and Alcohol Testing Program.

ROLLERS TO BE USED:

Two (2) self-propelled, multiple wheel, pneumatic-tired rollers shall be used and shall weigh between 7 and 12 tons, each roller shall have a total compacting width of at least 56 inches, have a minimum tire pressure of 60 psi, and be equipped with a watering system.

One (1) self-propelled, 2 axle (tandem) steel-wheel roller shall be used and shall weigh between 8 and 12 tons, and be equipped with scrapers, wetting pads and watering system. Combination pneumatic steel drum-type rollers are acceptable, as one unit only.

CONSTRUCTION OPERATIONS:

CHANGE IN WORK:

Without invalidating the Agreement, the Owner may, at any time, order additions, deletions, or revisions in the work. These will be authorized by Change Orders. Upon receipt of a Change Order, the Contractor will proceed with the work involved. All such work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the contract price or an extension or shortening of the contract time, an equitable adjustment will be made.

The Engineer or Owner may authorize minor changes or alteration in the work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order. If the Contractor believes that any minor change or alteration authorized by the Engineer entitles him to an increase in the contract price, he may make a claim.

Additional work performed by the Contractor without authorization of a Change Order will not entitle him to an increase in the contract price or an extension of the contract time, except in the case of an emergency as provided in these conditions.

It is the Contractor's responsibility to notify his Surety Company of any change affecting the general scope of the work or change in the contract price. The amount of the applicable Bonds shall be adjusted accordingly. The Contractor will furnish proof of such adjustment to the Owner.

CHANGE ORDERS:

The value of any work covered by a Change Order shall be determined in one of the following ways:

Where the work involved is covered by unit prices contained in the Contract Documents, application of unit prices to the quantities of the items involved shall be made. If the above method is agreed upon, the value shall be determined by the Engineer on the basis of costs and a percentage for overhead and profit. Costs shall only include labor, materials, equipment, and other incidentals directly related to the work involved. In such case, the Contractor will submit in form prescribed by the Engineer, an itemized cost breakdown together with supporting data.

The amount of credit to be allowed by the Contractor to the Owner for any such change which results in a net decrease in cost, will be the amount of the actual net decrease as determined by the Engineer. When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any.

PREPARATION OF EXISTING SURFACES BY MUNICIPALITY:

The Borough shall repair potholes, other areas of pavement failure, and major depressions in the existing pavement surface. The Borough may place a leveling course on planed, milled or existing surface, if required.

Immediately prior to application of asphalt-rubber, the surface shall be thoroughly cleaned by the Borough by sweeping. If non-weather delays postpone application, it shall be the Contractor's responsibility to re-sweep.

APPLICATION:

The asphalt-rubber mixture shall be applied at a rate of 20% at a temperature of 338°F to 419°F, at a rate of 0.50 to 0.65 gallons per square yard. Exact rate to be determined by the aggregate gradation, traffic volume and pavement condition.

Longitude joints shall be reasonably true to line and parallel to centerline. Where any construction joint occurs or around facilities such as catch basins, sanitary or storm sewer

manholes and utility gates, the edges shall be broomed back and blended so there are no gaps and the elevations are the same, free from ridges and depressions. Longitudinal joints shall be overlapped from 4 to 6 inches. The contactor will provide personnel to cover and uncover catch basins, manhole and utility covers within the scope of work made of material capable of withstanding the application of asphalt-rubber and aggregate over it.

During application, adequate provision shall be made to prevent marring and discoloration of adjacent pavements, structures, vehicles, foliage or personal property.

APPLICATION OF AGGREGATE:

The application of aggregate shall follow as close as possible behind the application of hot asphalt-rubber which shall not be spread further in advance of the aggregate spread that can be immediately covered. Construction equipment or other vehicles shall not drive on the uncovered asphalt-rubber. The hot-precoated aggregate shall be spread uniformly by a selfpropelled spreader at a rate of spread directed by the Town, generally between 30 to 40 pounds per square yard. Any deficient areas shall be covered with additional material.

ROLLING:

A minimum of (3) rollers shall be used for aggregate compaction into the hot asphalt-rubber. Two rollers must be pneumatic-tired and one must be steel-wheel. Rolling shall commence immediately following spread of aggregate. There shall be at least three coverages by the pneumatic-tired rollers to embed the aggregate particles firmly into the asphalt-rubber. A coverage shall be as many passes as are necessary to cover the entire width being spread with a pass being one movement of a roller will follow. Water shall be applied to the tires or wheels as required to limit sticking of the asphalt-rubber and aggregate to the rollers.

SWEEPING:

When the maximum amount of aggregate has been embedded into the asphalt-rubber and the pavement has cooled, all loose material shall be swept or otherwise removed. This will be done at a time and in a manner, which will not displace any embedded aggregate or damage the asphalt-rubber. Adjacent streets and streets used to transport pretreated stone to and from the jobsite and the stockpile will be swept, to remove loose stones from them on a daily basis, by the end of each work day. Post sweeping is the responsibility of the contractor.

TRAFFIC CONTROL:

Contractor will provide All traffic control signage and devices required to maintain traffic flow for local, emergency, and at least one-way traffic to all vehicles satisfactory to the

Borough's Police Department. Contractor to maintain at least one way traffic at all times during operations. The Borough will provide uniformed police officers as required for the project.

During construction and 24 hours following construction, vehicle speed should be posted to a maximum of 15 miles per hour. Signage shall be posted during application of the seal and construction advisory signing will be in place to advise motorists of construction. The contractor will supply all road construction and speed or loose stone advisory signs per the MUTCD during the application process.

QUALITY CONTROL AND INSPECTION:

Close supervision and inspection Borough by qualified personnel shall be maintained to insure that the rates of application and amount of rolling are being adhered to.

WEATHER:

The minimum air temperature shall be 60° Fahrenheit and rising with no rain predicted. Work shall not go forward if standing water is present. Work shall not begin if it is a better than 50% chance of rain for the day.

SUSPENSION OF WORK:

The Borough, through its representative, shall have full authority to suspend operations for all situations that would affect the outcome of the finished product. These situations shall include but not be limited to:

Poorly maintained or insufficient equipment.

Unprofessional work or employees.

Poor or predicted weather conditions.

Pavement is wet or has standing water

Method of Measurement

Chip seal—20% Rubber will be measured for payment by the number of square yards of surface area installed and accepted.

Basis of Payment

This work will be paid for at the contract unit price per square yard for Chip seal—20% Ruber which price shall include all materials, equipment, tools, labor, traffic control, including but not limited to traffic signs, barricades, cones, certified flagmen, and work incidental thereto.

Pay Item Pay Unit

Chip Seal—20% Rubber

SPECIFICATIONS FOR

HOT IN-PLACE ASPHALT RECYCLING

HEATER SCARIFICATION OF EXISTING ASPHALT PAVEMENT

1.0 DESCRIPTION:

This item shall be part of a multi-step process of asphalt surface rehabilitation that consists of softening the existing flexible pavement with heat and thoroughly stirring spinning or tumbling the mixture, applying an asphalt rejuvenator, milling/remixing, reshaping and compacting the hot in-place recycled surface. Installing a surface treatment or overlay is a separate and/or concurrent function of this work.

2.0 EQUIPMENT REQUIREMENTS:

A. <u>Preheaters</u>: The preheating machines shall be two self-contained machines specifically designed to heat the upper layers of the existing asphaltic pavements. The preheating machines shall be self-propelled and completely self-contained units capable of operating at speeds from ten (10') feet to twenty-five (25') feet per minute while uniformly heating the existing surface of the asphalt.

The heating unit shall consist of multi-rows of burners of a type specifically designed for and capable of producing 48 million BTUH; LPG will be used for the heating fuel in compliance with the standards of the State's Air Pollution Control Laws. The BTUH production rate is based upon heating twelve (12') feet wide. Burners shall be located on the front of the heater boxes spaced no more than ten (10") inches apart to achieve proper heat penetration at the required temperature while causing no injury due to overheating the asphaltic surface.

The entire burner assembly shall be so designed so that it may be raised or lowered by a single control and capable of articulation. The burner assembly shall be adjustable in width from eight (8') feet to fourteen (14') feet. The entire heating unit shall be enclosed and vented to contain the heat and prevent damage to plant material or any structures along the roadway. Each unit shall be equipped with an on board 500 gallon water system to be used to adequately reduce the temperature of the exhaust in the venting system thereby preventing desiccation of trees and shrubs by evapotranspiration due to high heat. Hand hoses with adjustable nozzles will be placed on each unit to allow for prewetting of specific plants or objects.

B. <u>Heater-Scarifier</u>: The heater-scarifier machine shall be one self-contained machine specifically designed to reprocess upper layers of existing asphalt pavements.

The heater-scarifier machine shall be a self-propelled and completely self-contained unit capable of operating at speeds of ten (10') to twenty-five (25') feet per minute while uniformly heating, scarifying, applying rejuvenator, mixing, and screeding the existing pavement to a minimum depth of one (1") to one and one-half (1-1/2") inches at a minimum temperature of 250 degrees Fahrenheit. The wheel base shall not be less than eighteen (18') feet and the total weight shall not be less than 35,000 pounds.

The heating unit shall consist of multi-rows of burners of a type specifically designed for and capable of producing 48 million BTUH; LPG will be used for the heating fuel in compliance with the standards the State's Air Pollution Control Laws. The BTUH production rate is based upon heating twelve (12') feet wide. Burners shall be located on the front of the heater boxes spaced no more than ten (10") inches apart to achieve proper heat penetration at the required temperature while causing no injury due to overheating the asphaltic surface.

The entire burner assembly shall be so designed so that it may be raised or lowered by a single control and capable of articulation. The burner assembly shall be adjustable in width from eight (8') feet to fourteen (14') feet. The entire heating unit shall be enclosed and vented to contain the heat and prevent damage to plant material or any structures along the roadway.

All equipment shall conform to Federal, State and local DOT and Fire Marshall regulations, and laws relative to the transportation of LPG.

- C. <u>Scarifying Unit</u>: The scarifying unit consists of no less than two rows of spring loaded, carbide tip teeth adjustable in width from eight (8') to fourteen (14') feet in increments to one (1") inch and construction in one (1') foot sections to conform to the pavement contour to insure penetration of the teeth and prevent damage to utility structures.
- D. <u>Spraying Unit</u>: Immediately behind the teeth of the scarifying unit, an application of a polymer modified rejuvenator shall be applied to the newly remixed area. Nozzle size on the spray bar and pump shall be a combination that will deliver the approved rate of application according to the forward speed of the machine in conjunction with discretion of Highway Superintendent. The tank on the machine shall be heated, and the heating unit on the storage tank for rejuvenator shall be thermostatically controlled to maintain an even specified temperature.

In addition to the above, it will be required that the spraying unit on the machine be equipped with an electronic, digital measuring system (computer) to constantly monitor the quantity of rejuvenating agent being applied. This device will be calibrated to show gallons used to the nearest tenth.

E. <u>Mill/Remixer Unit</u>: Immediately following the application of the recycling agent, a dual-drum enclosed mill shall mill the heated asphalt to the depth of the heat thoroughly mixing the rejuvenating agent with the scarified and milled material. This mill/remixer system shall be an integral part of the scarifying machine and shall be located between the spraying system, which applies the rejuvenator, and the screed. This mill/remixer system shall be fully hydraulically operated and shall be able to work at variable speeds from 0 to 60 rpm, and shall be retractable from 14.6 ft. to 8.6 ft. wide. This mill shall also be able to break in the center to allow for quarter point and crown control.

No heater scarification can take place without this unit present and in operating condition.

F. Screed and Initial Compaction Unit:

- 1. <u>Screed</u>: The hot Scarified material shall be uniformly distributed to the desired longitudinal and transverse section by the use of a heated, augered vibratory screed. The screed must be equipped with an adjustable crown control, and each end of the screed must have handwheel adjusting screws for providing the desired longitudinal and transverse section.
- 2. <u>Compaction Unit</u>: Immediate compaction shall take place with rolling equipment of sufficient type and size to compact the recycled bituminous material to the required density. Normally this can be accomplished with the application of an eight (8) to twelve (12) ton vibratory roller. State specifications for bituminous concrete surfaces shall apply.

3.0 CONSTRUCTION REQUIREMENTS:

- A. <u>Pavement Preparations</u>: The entire area to be resurfaced shall be cleaned of all deleterious material. If required, the Owner shall broom clean the area prior to commencement of work or specify the contractor to do the same. The Contractor is required to provide traffic control.
- B. <u>Heating, Scarifying, Leveling, and Rejuvenating</u>: The existing asphaltic material shall be heated, scarified and mixed to a minimum depth of one (1") inch. Under no circumstances shall the scarifying teeth penetrate into the existing base.
 - B. The heated polymer modified rejuvenator shall be applied immediately following the scarifying teeth. The polymer modified rejuvenator is specifically formulated for use with the hot in-place recycling, and therefore, shall not be substituted.

The hot scarified material shall then be mill/remixed immediately following the

application of the recycling agent to eliminate premature compaction of the hot recycled asphalt resulting in final differential compaction and to the desired longitudinal and transverse section by the use of an attached, heated, auguered screed. Directly behind the screed process shall be an 8 to 12 ton roller for compaction

C. <u>Overlay</u>: The application of the final wearing surface consisting of either hot mix asphalt pavements, nova-chip, micro-paving, or chip seals follow after a prescribed interval or delay. These materials are applied with conventional equipment in conformance with standard construction methods. NOTE: Surface treatment not included in unit price (work to be done by others).

At all manholes, valve boxes, etc., the finished grade of the heater-scarifying process shall be transitioned to blend into the existing grade.

4.0 METHOD OF MEASUREMENT

Asphalt recycling performed and application of rejuvenating agent shall be measured by the square yard.

5.0 BASIS OF PAYMENT:

Prices shall include all labor, equipment, materials, fuels, supplies, rejuvenating agent, mobilization, bond and insurance required to complete the above item. Payment for heating, scarifying, application of rejuvenating agent, milling/remixing, and compaction will be made at the price bid per square yard.

SPECIFICATIONS FOR EMULSIFIED RECYCLING AGENTS

These specifications cover emulsified recycling agents to be used in cold mix recycling or hot inplace recycling. The final acceptance of these materials shall be based on their performance to (a) restore the aged "old" asphalt characteristics to a consistency level appropriate for construction purposes, (b) restore the aged asphalt to its optimal chemical characteristics for durability, (c) provide sufficient additional binder to coat new aggregate that is added to the recycled mixture, and (d) provide sufficient additional binder to satisfy mixture design requirements.

Note: All samples shall be shipped and stored in clean, airtight, sealed wide mouth jars or bottles made of plastic. The specific gravity of the emulsified recycling agent shall be reported for each shipment.

	ASTM	ERA-5	ERA-2	25P	
TEST	METHOD	MIN.	MAX	MIN.	MAX
Viscosity, Saybold	D244	15	85	15	85
Furol @ 25 C, sec.					

Storage Stability					
Test, 1 Day	D244	_	1.0	_	1.0
Sieve Test, Retained on No. 20 Sieve Percent	D244	-	0.1	-	0.1
Cement Mixing, Test Percent	D244	_	2.0	_	2.0
Residue by Evaporation Percent	D244	65	_	65	_
Tests on Residue Viscosity @ 60 C cst	D2170	200	800	1000	5000
Torsional Recovery				20	_
Base Recycling Agent (ie. Prior) to emulsification	D4552		RA-5	RA-25	

ASPHALT PRICE ADJUSTMENTS:

LIQUID BITUMINOUS MATERIALS SPECIFICATION (Micro-surfacing)

1. Asphalt price adjustments allowed will be based on \$315 per ton average of the F.O.B. terminal price per ton of unmodified PG 64-22 binder without anti-stripping agent (base average F.O.B. terminal price).

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

- 2. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the "Adjustment Date", starting at time of submission of bid. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month (i.e., May 1, 2007) following the adjustment date.
- 3. The unit prices of bituminous materials purchased based on this specification will be subject to adjustment based on the following formula:

NEW MONTHLY AVERAGE F.O.B TERMINAL PRICE:

The average F.O.B terminal price for unmodified PG 64-22 binder without anti-stripping agent as determined by the Department of Transportation Standard Specification, or certified F.O.B. tickets.

BASE AVERAGE F.O.B TERMINAL PRICE

The average F.O.B. terminal price of unmodified PG 64-22 binder without anti-stripping agent as determined by the Department of Transportation as of bid submission date.

TOTAL ALLOWABLE PETROLEUM:

The percentage of total allowable petroleum for each item is as follows:

GROUP 31506 – LIQUID BITUMINOUS MATERIALS SPECIFICATION (Micro-surfacing)

			Petroleum	Total Allowable
Item #	Item	Asphalt %	Allowance	Petroleum %
1	Micro Type II	9.0 %	0	9.0 %
2	Micro Type III	7.5 %	0	7.5 %

Asphalt price adjustment will not be allowed for materials, which do not have an asphalt cement base.

EXAMPLE:

Items #1

Base Avg. Price = \$309.00

New Avg. Price = \$319.00

Total Allowable Petroleum = 9.0% (Micro Type II – Item 1)

 $$319.00 - 309.00 \times .09 = 0.9 per US Ton

Positive Price Adjustment number shall be added to original per Ton Bid Price

Negative Price Adjustment number shall be subtracted from original per Ton Bid Price.

EXHIBIT 6

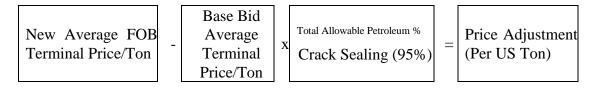
LIQUID BITUMINOUS MATERIALS (Crack Sealing) SPECIFICATION

ASPHALT PRICE ADJUSTMENTS: PG64-22 + FIBERS

1. Asphalt price adjustments allowed will be based on the \$315.00 per ton of the F.O.B. terminal price per ton of unmodified PG 64-22 binder without anti-stripping agent (base average F.O.B. terminal price). The new monthly average terminal price will be determined based on price of pre-approved primary sources of performance graded binder.

NOTE: The same grade of asphalt cement used in establishing the base average F.O.B. terminal price shall be used in establishing the new average F.O.B. terminal price.

- 2. The new average F.O.B. terminal price will be determined based on the above F.O.B. terminal prices posted on the 20th of each month, hereafter known as the "Adjustment Date", starting at time of submission of bid. However, asphalt price adjustments, in accordance with the formula below, will be effective for deliveries made on and after the first of the month (i.e., May 1, 2007) following the adjustment date.
- 3. The unit prices of bituminous materials purchased from any award based on this specification will be subject to adjustment based on the following formula:



NEW MONTHLY AVERAGE F.O.B TERMINAL PRICE:

The average F.O.B terminal price for unmodified PG 64-22 binder without anti-stripping agent as determined by the Department of Transportation Standard Specification, or certified F.O.B. tickets.

BASE AVERAGE F.O.B TERMINAL PRICE

The average F.O.B. terminal price of unmodified PG 64-22 binder without anti-stripping agent as determined by the Department of Transportation as of bid submission date.

TOTAL ALLOWABLE PETROLEUM:

The percentage of total allowable petroleum for each item is as follows:

DC64.22		Petroleum	Total Allowable
PG64-22	Asphalt %	Allowance %	Petroleum %
(Item #4)	95%	0	95%

Asphalt price adjustments will not be allowed for materials, which do not have an asphalt cement base.

EXAMPLE:

Item PG64-22 + Fibers

Positive Price Adjustment number shall be added to original per pound Bid Price.

Negative Price Adjustment number shall be subtracted from original per pound Bid Price.

Price adjustment shall not apply to the street Table bids provided.