2011

Paving Projects

Bid Specifications

Bid No. 11 - 27

May 19, 2011

INVITATION TO BID

The City of Rochester, New Hampshire, will accept sealed bids for **Paving Projects**.

Bids must be submitted in a sealed envelope plainly marked:

Sealed Bid: "SEALED BID #11-27
Paving Projects"

City of Rochester, New Hampshire
Attn: Purchasing Agent
31 Wakefield Street
Rochester, NH 03867

All bids must be received no later than **May 19, 2011** at **2:15** pm. Actual bid opening will begin at **2:30 PM**. No late bids, faxed, e-mailed or telephone bids will be accepted. Bid proposals and specifications may be obtained by visiting www.rochesternh.net, or emailing purchasing@rochesternh.net, or by contacting the Purchasing Agent at City Hall, 31 Wakefield Street, Rochester, NH 03867, (603) 335-7602. All bid questions must be submitted in writing (email preferred) to the Purchasing Agent at least five (5) working days prior to bid opening. All bid proposals must be made on the bid proposal forms supplied, and the bid proposal forms must be fully completed when submitted.

INFORMATION FOR BIDDERS

The City of Rochester, New Hampshire, (OWNER) will accept sealed bids at the Business Office, 31 Wakefield Street, Rochester, New Hampshire until 2:15 p.m. (local time) on May 19, 2011, at which time the acceptance of bids will be closed. All bids received will be opened and read aloud at 2:30 p.m. The envelopes containing the bids must be sealed and designated as CITY OF ROCHESTER 2011 PAVING PROJECT – Bid No. 11-27. The bid opening shall be public and open to all parties.

The following is a summary of the work anticipated to be performed in 2011. The terms and condition of the contract is found within these documents.

The Contract Documents request proposals for an individual contract. The intent is to allow the OWNER to evaluate the bids and make decisions in the best interest of the community. It shall be assumed by both parties that the actual quantities will differ from the estimate in the bid form. The estimated quantities are only for comparison purposes.

All bids must be submitted with a Bid Bond in the amount of ten percent (10%) of the Bid Price executed between the Bidder and a Surety Company.

Bidders must examine each of the Contract Documents, visit the location of the work, and inform themselves of the difficulties attending the execution of the work prior to the submission of their Proposals. The CONTRACTOR shall give attention to the definitions included in the Contract Documents.

The OWNER reserves the right to postpone the date for presentation and opening of Proposals and will give notice of such postponement to each known Bidder.

The successful Bidder will be required to furnish the stipulated Bonds and Insurance Certificates.

In the event of discrepancies between the price totals quoted in the Proposal and the unit price figures, the unit price figures shall control. The price is to include the furnishing of all material, plant, equipment, tools, labor, and other facilities required for the completion of the work except as may be otherwise expressly provided in the Contract Documents.

After the award of the Contract, if the CONTRACTOR desires to use equipment or methods other than those specified or shown in these documents, the CONTRACTOR shall submit in writing: data to prove equality, reason for change, the amount of credit (if any) to the Contract Price and provide documentation for any changes required to arrive at a decision as to the suitability of the substitution by the OWNER.

The OWNER reserves the right to reject any or all Proposals for any reason, or to accept any bid which it deems to be in its best interest. Any Proposal, which is incomplete, obscure, or irregular, may be rejected; any Proposal having erasures or corrections in the price sheet may be rejected; any Proposal that omits a bid on any one or more items may be rejected; and any Proposal accompanied by an insufficient or

irregular certified check or Bid Bond may be rejected. The use of unbalanced bids is prohibited and will be rejected.

If the Bidder submits a Proposal before the deadline time for submission, the Bidder may, in writing, modify his original Proposal for submission. No oral, telephone, or telegraph modifications will be considered.

It is the duty of the OWNER not to award this Contract to any Bidder who does not furnish evidence satisfactory to the OWNER that the Bidder has the ability, skill, integrity and experience in this class of work and has sufficient capital and plant to enable the successful and complete execution of this contract within the specified time.

In determining the skill, ability, and integrity of the responsible and eligible Bidders the following elements will be considered: Whether the Bidder has (a) previously defaulted on, failed to perform properly, or failed to complete on time contracts of similar nature; (b) habitually and without just cause neglected payment for material or to employees; (c) a permanent place of business; (d) adequate plant and equipment to do the Work properly; (e) a suitable financial status to meet the obligations incident to the Work; (f) appropriate technical experience; (g) labor force that can work in harmony with all other elements of labor employed (h) sufficient bonding capacity; and, (i) adequate skilled supervisory personnel.

Within thirty (30) days after opening the Proposals the OWNER will prepare a Notice of Intent to Award signed by a duly authorized representative of the OWNER. This Notice of Intent to Award shall bind the successful Bidder to execute the Contract approval.

Notice of Approval and formal acceptance of the Proposal will be made in writing to the successful Bidder. A duly authorized representative of the OWNER will sign the Notice of Approval.

The rights and obligations provided for in the Contract shall become effective and binding upon the Parties only with its formal execution by the OWNER.

The successful Bidder(s) shall execute a Performance Bond in the amount of one hundred percent (100%) of the Bid Price. The Bidder, OWNER and a Surety Company shall execute Bond.

The successful bidder shall provide a Payment Bond in the amount of one hundred percent (100%) of the Bid Price, executed between the Bidder, OWNER and a Surety Company.

The successful bidder shall commence work under this contract on or before a date to be specified in the "Notice to Proceed" and complete the segments in the order as described in the following table. Projects awarded prior to July 1, 2011 shall be completed no later than August 26, 2011. Projects awarded after July 1, 2011 shall be completed no later than October 28, 2011. The Project is to be fully completed not later than October 28, 2011.

The following list of paving projects and approximate quantities scheduled for 2011 do not commit the OWNER to perform the work described or to limit the work to only those projects described below. The OWNER reserves the right to change project scopes. The projects shall be completed in the following priority order:

Priority 1 2	Street Lambert Court School Street	Description Reclaim & pave Reclaim & pave
3	Salmon Falls Road between Portland St & Stonewall	Overlay
4	Museum Way	Reclaim & pave
5	Congress Street	Overlay
6	Brattle Street	Reclaim & pave
7	Fairway Avenue	Reclaim & pave
8	Whitehall Road between So Main & railroad tracks	Overlay
9	Davis Boulevard	Overlay
10	Governors Road	Reclaim & pave
11	Summer Street	Reclaim & pave

Projects shall be awarded as funding is available. Some projects may be delayed until after the beginning of the fiscal year (July 1, 2011) pending additional funding necessary to complete the work.

1. Cold Plane

	1.5 inch cold plane	– as nece	ssary
Reconstru	ct Roadside Ditches		
	Governor's Road	9000	L.F.
Reclaim a	nd Pave		
	Lambert Court School Street Museum Way Brattle Street Fairway Avenue Governor's Road Summer Street	2200 1250 6000 2000 2400 14500 8000	S.Y. S.Y. S.Y. S.Y. S.Y. S.Y.
4. Overla	ay of one-inch wearing course		
	Salmon Falls Road (Port – Stone) Congress Street Whitehall Road Davis Blvd	8000 2350 6500 5800	S.Y. S.Y. S.Y. S.Y.

BID PROPOSAL

Proposal of	
(Hereinafter called	"BIDDER"), organized and existing under the laws of the State of
doing business as	
	Corporation, Partnership, or an Individual

To the City of Rochester (hereinafter called "OWNER").

In compliance with your Advertisement for Bids, bidder hereby proposes to perform all WORK for the 2011 Paving Project in strict accordance with the CONTRACT DOCUMENTS, within the time set forth therein, and at the prices stated below.

By submission of this bid, each bidder certifies that his bid has been arrived at independently, without consultation, communication, or agreement as to any matter relating to this bid with any other BIDDER or with any competitor.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in the NOTICE TO PROCEED and fully complete according to the schedule herein. Bidder further agrees that at the OWNER's option, the OWNER may split the contract and award the contract to more that one bidder.

Bidder hereby agrees to meet the schedule, or be subject to the penalties outlined in said article if schedule is not adhered to.

Any Bidder who's Proposal shall be accepted will be required to execute the Contract within five (5) days after notice that the Contract has been awarded to him. Failure or neglect to do so shall constitute a breach of the agreement affected by the acceptance of the Proposal.

The OWNER will retain the amount of the certified check or Bid Bond accompanying the Proposal of such Bidder as liquidated damages for such breach. In the event any Bidder whose Proposal shall be accepted shall fail or refuse to execute the Contract herein provided, the OWNER may, at his option, may determine that such Bidder has abandoned the Contract and thereupon his Proposal and the acceptance thereof shall be null and void and the OWNER will be entitled to liquidated damages as cited above.

RIDDEI	R ACKNOV	VLEDGES R	ECEIPT OF	- THE FOLI	LOWING AD	DENDA:

BIDDER agrees to perform all the work described in the CONTRACT DOCUMENTS for the following unit prices or lump sum.

Notes:

- 1. The Bidder shall submit his/her proposal upon the form(s) furnished by the City. The bidder shall specify a unit price for each pay item. All figures shall be in ink or typed.
- 2. All prices must be written in ink. Unit prices shall be written in words as well as figures for the entire proposal. In case of discrepancy between words and figures the words shall govern the unit price. If a unit price or lump sum bid already entered by the bidder on the proposal form is to be altered it should be crossed out with ink, the new unit price or lump sum bid entered above or below it and initialed by the bidder, also with ink. In the case of discrepancy between the prices written in words and those written in figures, the prices written in words shall govern.
- 3. All prices given shall include labor, materials, and equipment for work in place in accordance with these Contract Documents.
- 4. The Bidder's proposal must be signed in ink by the individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture, by one or more officers of a corporation, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, his name and post office address must be shown, by a partnership the name and post office address of each partnership member must be shown; by a corporation, the name of the corporation and its business address must be shown, together with the name of the state in which it is incorporated, and the names, titles, and business addresses of the President, Secretary, and Treasurer.

BID SCHEDULE

ITEM NO.	ESTIMATE	ITEM DESCRIPTION & UNIT PRICE	ITEM PRICE
	QUANTITY	(in both words and numerical)	(in numerals)
1	36,350 SY	ASPHALT RECLAMATION	
		dollars andsystem SY	\$
		(\$) per SY	
2	2,200 SY	COLD PLANING dollars andcents per SY (\$) per SY	\$
3	1,000 CY	CRUSHED GRAVEL	
	,	dollars andcents per CY.	\$
		(\$) per CY	
4	5000 TONS	BITUMINOUS CONCRETE dollars andcents per TON (\$) per TON	\$
4A	EA	BITUMINOUS CONCRETE – NIGHT WORK dollars andcents per EA (\$) per EA	\$
5	36,350 SY	BASE PREPARATION, COMPACTION AND FINE GRADING dollars and cents per	\$
		(\$) per SY	

ITEM NO.	ESTIMATE	ITEM DESCRIPTION & UNIT PRICE	ITEM PRICE
	QUANTITY	(in both words and numerical)	(in numerals)
6	500 TONS	HAND PAVING	_
			\$
		dollars and	Φ
		TON cents per	
		(\$) per TON	
8	150 SQ. FT.	PAVEMENT MARKINGS	
		dollars and	\$
		cents per SQ.	
		F1	
		(\$) per SQ. FT	
9	200 CY	GRAVEL SHOULDERS	
		dollars and	\$
		cents per C	Y
		(\$) per CY	
10	1500 LF	SAW CUT PAVEMENT	
			_
		dollars and	\$
		cents per LI	7
		(A)	
11	12 EA	(\$) per LF MOBILIZATION	
11	12 EA	WOBILIZATION	_
		dollars and	\$
		cents per Ea	A
		(\$) per EA	
12	200 HOURS	OFFICERS	
		_FIFTY FIVE dollars and	\$11,000
		donars and cents per HR	
		55335 per 1110	(11 11 11 11 11 11 11 11 11 11 11 11 11
		(\$_55.00) per HR	

ITEM NO.	ESTIMATE	ITEM DESCRIPTION & UNIT PRICE	ITEM PRICE
	QUANTITY	(in both words and numerical)	(in numerals)
13	2 EA	TRAFFIC LOOP DETECTORS	
		dollars and	\$
		cents per EA	
		(\$) per EA	
14	12 EA	TRAFFIC CONTROL	
		dollars and	\$
		cents per EA	
		(\$) per EA	
15	150 EA	REMOVE & RESET CASTINGS	
		dollars and	\$
		donars andcents per EA	<u> </u>
		(C) No. 11 E.A.	
16	20 TONS	(\$) per EA CALCIUM CHLORIDE	
		dollars andents per TON	\$
		cents per Torv	
17	9,000 LF	(\$) per TON EXCAVATION OF DITCH LINES	
17	9,000 LI	EACAVATION OF DITCH LINES	
		dollars and	\$
		cents per LF	
		(\$) per LF	
18	70 EA	MAILBOX REMOVAL & RESET	
		dollars and	\$
		cents per EA	
		(\$) per EA	

ITEM NO.	ESTIMATE	ITEM DESCRIPTION & UNIT PRICE	ITEM PRICE
	QUANTITY	(in both words and numerical)	(in numerals)
19	1,350 SY	LOAM & SEED	
		dollars and	\$
		cents per SY	
		(\$) per SY	
20	350 LF	UNDERDRAIN	
			¢.
		dollars and	\$
		cents per LF	
		(\$) per LF	
21	25 LF	REBUILDING CONCRETE / BRICK	
		STRUCTURES	
			\$
		dollars and	
		cents per LF	
		(¢) man I E	
22	1000 LF	(\$) per LF CURBS	
22	1000 L1	CURBS	
		dollars and	\$
		cents per LF	
		conts per Di	
		(\$) per LF	

Total Bid:	The sum of (in words)		
	(in figures) \$		
`	re to be shown in both wown in words will govern	ords and figures. In case of disc)	repancy, the
	•	all labor, materials, bailing, shoring over the finished work of the seven	•
	understands that the OW informality in bidding.	VNER reserves the right to reject	any or all bids and
	_	nall be good and may not be w ne scheduled closing time for	
attached witl Conditions.	hin 10 days and deliver attached		red by the general
the OWNER	in the event the contractified the contraction in the contraction.	ct and bond are not executed wit delay and the additional expens	hin the time set
SUBMITTED	O ON	, 20	
Name of CO	NTRACTOR		
Address:			
Telephone:		Fax No	

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

	(Name of CONTRACTOR)
	(Address of CONTRACTOR)
a	, hereinafter called Principal
(Corporation, Partn And	ership, or individual)
	(Name of Surety)
	(Address of Surety)
	rety, are held and firmly bound unto the City of Rochester, NH, 31 ster, NH 03867 hereinafter called OWNER, in the penal sum of Dollars, \$()
	e United States, for the payment of which sum well and truly to be lives, successors, and assigns, jointly and severally, firmly by these
into a certain contrac	THIS OBLIGATION is such that whereas, the Principal entered twith the OWNER, dated the day of, a copy of which is hereto attached and made a part hereof for
the construction of 2	011 Paving Project.

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

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way 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 Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrume	ent is execut			parts
			mber)	
each one of which shall be deemed an	original, this	3		day of
2				
ATTEST:				
		incinal\		
	(PII	incipal)		
(Principal Secretary)				
BY:				
(SEAL)				
(SEAL)				
			(Address)	
(Witness as to Principal)				
(Address)				
			(Surety)	
	Bv.			
	<i>Dy</i>	(Attor	ney-in-fact)	
_		·		
ATTEST:				
(Witness as to Surety)				
(Williess as to Surety)				
(Address)				
(Address)				

NOTE: Date of BOND must not be prior to date of Contract.

If Principal is a 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.

PAYMENT BOND

(In accordance with NH R.S.A., Chapter 447)

KNOW ALL MEN BY THESE PRESENTS: that

	(Name of CONTRACTOR)		
	(Address of CONTRACTOR)		
a (Cor and	poration, Partnership, or Individual)	, hereinafter called Principal	
	(Name of Surety)		
Hamp	(Address of Surety) nafter called Surety, are held and firmly boundshire, 31 Wakefield St., Rochester, NH 038 sum of	67 hereinafter called OWNER, in the	
	rful money of the United States, for the payne, we bind ourselves, successors, and assignants.		
into a	CONDITION OF THIS OBLIGATION is such certain contract with the OWNER, dated the 2, a copy of which is hereto at g Project.	e day of	
firms,	, THEREFORE, if the Principal shall prompt SUBCONTRACTORS, and corporations ha hed, for equipment hired, including trucks, for	aving any claim for labor performed	or

PROVIDED, FURTHER, that the notice required under this BOND to obtain benefits under this obligation by any person, firm, or corporation having any claim for labor performed, materials, machinery, tools, equipment or supplies, shall extend for a period of ninety (90) days after completion and acceptance of the work as provided in said contract with the OWNER. Such notice shall consist of a statement of the claim and

lubricants, power, tools, hardware and supplies purchased by the Principal and used in

carrying out the contract, and for labor and parts furnished upon the order of the Principal for the repair of equipment used in carrying out the contract, in accordance with the provisions of RSA 447:15, 16, 17 and 18, and satisfy all claims and demands incurred under such contract, then this obligation shall be void; otherwise to remain in

full force and effect.

must be filed in the office of the Clerk of the Superior Court of the County within which the contract shall be principally performed. The Clerk of the Superior Court is required to send a copy of the statement of claim by mail to the Principal and Surety hereunder. Any person, firm, or corporation shall within one (1) year after filing such claim file a petition in the Superior Court for the County within which the contract shall be principally performed to enforce the claim in accordance with the provisions and requirements of RSA 447:18.

PROVIDED, FURTHER, that the said Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way 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 Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instru	iment is executed		
each one of which shall be deemed of2	an original dated	(number) this the	_ day
ATTEST:			
		(Principal)	-
(Principal Secretary)			
	Ву:		_
(SEAL)		(Name and Title)	
		(Address)	-
(Witness as to Principal)		_	
		_	
(Address)			

2011 Paving Projects

Bid No 11-27

(Surety)

By:_____

ATTEST:

(Attorney-in-fact)

NOTE: Date of BOND must not be prior to date of Contract. If Principal is a 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.

(Witness as to Surety)

(Address)

BID BOND

KNOW ALL MEN BY THESE PRESENTS,	that we, the undersigned
as Principal, and	
	d unto The City of Rochester as OWNER in the penal sum of for the payment of which, well and truly to be ourselves, successors and assigns.
Signed, this day of	_
	ch that whereas the Principal has submitted to The City of and hereby made a part hereof to enter into a contract in writing,
NOW, THEREFORE, (a) If said BID shall be rejected, or	
of Contract attachment hereto (properly cor BOND for faithful performance of said contr furnishing materials in connection therewith by the acceptance of said BID, then this ob- and effect; it being expressly understood ar	nd the Principal shall execute and deliver a contract in the Form impleted in accordance with said BID) and shall furnish a ract, and for the payment of all persons performing labor a, and shall in all other respects perform the agreement created ligation shall be void, otherwise the same shall remain in force and agreed that the liability of the Surety for any and all claims amount of this obligation as herein stated.
	ulates and agrees that the obligations of said Surety and its ed by any extension of the time within which the OWNER may eby waive notice of any such extension.
	If the Surety have hereunto set their hands and seals, and such neir corporate seals to be hereto affixed and these presents to and year first set forth above.
Principal	_ (L.S.)
Fillicipal	
Surety	_
Ву:	-

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

AGREEMENT

THIS AGREEMENT, made this	day of	, 2 by
and between The City of Rochester, NI	H hereinafter called "OWNER" ar	nd
		doing
business as (an individual,) or (a partner "CONTRACTOR"	ership,) or (a corporation) hereina	after called

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

- 1. The CONTRACTOR will commence and complete the 2011 Paving Projects, hereafter called the PROJECT, as shown in the Notice to Proceed and as specified herein.
- The CONTRACTOR will furnish all of the material, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECT described herein.
- 3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS after the date of the NOTICE TO PROCEED and will complete according to the schedule herein,
- 4. The CONTRACTOR hereby agrees to meet the schedule, or be subject to the penalties outlined within these documents if the schedule is not adhered to.
- 4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the unit prices as shown in the BID schedule.
- 5. The term "CONTRACT DOCUMENTS" means all documents contained in the 2011 Paving Projects dated xxxxxxx and the following addenda:

No	dated	, 2
No	dated	, 2

- The OWNER will pay to the CONTRACTOR in the manner and at such times as set forth in the Contract Documents in such amounts as required by the CONTRACT DOCUMENTS.
- 7. The OWNER may at its sole option add more city streets to be paved within the time frame of this contract. The OWNER consults with the CONTRACTOR to set a schedule for the added streets. The OWNER will pay for the additional work using the unit prices as bid and agreed to under this agreement, unless otherwise provided in the General Conditions.
- 8. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in four (4) copies, each of which shall be deemed an original on the date first above written.

(CEAL)	OWNER: FOR THE CITY OF ROCHESTER
(SEAL) ATTEST: Name	By Name
Title	Title
(SEAL)	CONTRACTOR:
Name	Ву
	Name
	Address

CONTRACT DOCUMENTS AND DEFINITIONS

ARTICLE 1 - DEFINITIONS

Wherever the words defined in this article, or pronouns used in their stead, occur in this contract and specifications hereto attached, they shall have the meanings herein given.

- 1.1 OWNER The word OWNER shall mean the first party, any board, officer or agent, authorized to act for the said party of the first part, in the execution of the work of this Contract.
- 1.2 CONTRACTOR The word CONTRACTOR shall mean the party of the second part, designated, entering into this Contract for the performance of the Work required, or the legal representative of said party or the agent appointed for said party in the performance of the work.
- 1.3 SUBCONTRACTOR The word SUBCONTRACTOR shall mean a person, firm or corporation supplying labor or materials for work at the site of the project for, and under separate Contract agreement with the Contractor.
- 1.4 ENGINEER The word ENGINEER shall mean OWNER, either acting directly or through any authorized representatives.
- 1.5 STANDARD SPECIFICATIONS Reference to "Standard Specifications" and "Standard Specifications for Road and Bridge Construction" mean the State of New Hampshire, Department of Transportation, Standard Specifications for Road and Bridge Construction, latest edition and all its amendments.

ARTICLE 2 - OBLIGATIONS AND LIABILITY

- 2.1 The CONTRACTOR shall complete the work to the satisfaction of the ENGINEER at the prices herein agreed upon and fixed therefore.
- 2.2 The CONTRACTOR shall conduct his work so as to interfere as little as possible with private business and public travel. He shall, at his own expense, wherever necessary or required, maintain light, furnish watchmen and take such precautions as may be necessary to protect life and property. The Contractor shall bear all losses resulting to him or the OWNER due to the amount or nature of the work or due to weather elements or other causes. The CONTRACTOR shall assume the defense of all claims whatsoever against the contractor or the OWNER and indemnify, save harmless, and insure the OWNER, its officers or agents, against claims that may arise from injury or damage to persons, corporations or property. Claims against the contractor shall be settled in an expedient manner, proof of which shall be provided to the ENGINEER.
- 2.3 The OWNER disclaims any authority or responsibility for job site safety and for the safety of persons who are or are not part of the construction process related to the work

carried out under this Agreement. It is understood and agreed that the ENGINEER will not be responsible for compliance of safety programs, put forth by the CONTRACTOR or related OSHA regulation required to be followed by the CONTRACTOR, his/her employees, subcontractors and agents. Job site safety shall be the sole responsibility of the CONTRACTOR at all times.

ARTICLE 3 - ENGINEER TO DECIDE

- 3.1 The ENGINEER shall in all cases determine the amount, quality, accessibility and fitness of the kinds of work and materials which are to be paid for under this contract.
- 3.2 Nothing in this agreement shall be construed as giving the ENGINEER the responsibility to direct construction methods, techniques, procedures or safety methods.

ARTICLE 4 - INTENTIONS OF DOCUMENTS

- 4.1 The order of the work is outlined within these documents.
- 4.2 The ENGINEER shall make all necessary explanations as to the meaning and intention of all documents.

<u>ARTICLE 5 - ABSENCE OF CONTRACTOR</u>

5.1 Work shall neither commence nor proceed unless supervised by the CONTRACTOR or his duly authorized superintendent or foreman. Delays in the work due to the absence of the CONTRACTOR or his duly representative shall not constitute reason for extension of time for completion. The ENGINEER shall be notified at least 24 hours in advance for any deviation from the normal daily work schedule.

ARTICLE 6 - PARTS OF THE CONTRACT

6.1 The information for bidders, all addenda, the proposal submitted by the CONTRACTOR, the Specifications, are made parts of this contract.

ARTICLE 7 - ERRORS AND OMISSIONS

- 7.1 Should a discrepancy appear or any misunderstandings arise as to the import of anything contained in the interpretation the decision of the ENGINEER shall be final and binding on both parties of this contract. The CONTRACTOR shall immediately notify the ENGINEER of any known discrepancies for proper resolution.
- 7.2 Any corrections may be made by the ENGINEER when such correction is necessary for their fulfillment of their intention as construed by him. When the corrections add to the amount of work to be done by the CONTRACTOR, compensation for said additional work shall be made in accordance with the provisions of the contract for extra work.
- 7.3 Should a Bidder find discrepancies in or omissions from the Contract Documents or are in doubt as to their meaning; the Bidder should at once notify the OWNER. In

general, no answer will be given to the prospective Bidders in reply to an oral question, if the question involves the equality or use of products or methods other than those specifically designated or described in the Specifications. All information given to Bidders by means other than set forth in the Contract Documents is given informally and shall not be used as the basis of a claim-against the OWNER.

7.4 Omissions, discrepancies, and questions must be submitted in writing to the OWNER at least five (5) working days before the date for receipt of bids. If a question involves the equality or use of products or methods not specifically designated or described in the Specifications, it must be accompanied by Drawings, Specification, or other data in sufficient detail to enable the OWNER to determine the equality or suitability of the product or method. In general, the OWNER will neither approve nor disapprove particular products prior to the opening of the bids; such products will generally be considered only when offered by the CONTRACTOR for incorporation into the work after the award and signing of the Contract. The OWNER will prepare Addenda to address all questions received and answers provided. At least three (3) days prior to the bid opening date and time, Addenda will be sent to each of Bidder who has taken out the Contract Documents.

<u>ARTICLE 8 – CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE</u>

- 8.1 The Contractor shall deliver to the OWNER at the time of execution of the Contract, certificates of all insurance required hereunder. The certificates of insurance shall contain the description of the Project, and shall state that the companies issuing insurance will mail to the OWNER ten (10) days notice of cancellation, alteration or material change of any listed policies. The Contractor shall keep in force the insurance required herein for the period of the Contract. At the request of the OWNER, the Contractor shall promptly make available a copy of any and all listed insurance policies. The requested insurance must be written by a Company licensed to do business in New Hampshire at the time the policy is issued and throughout the duration of the contract.
- 8.2 The City of Rochester, NH shall be listed as additional insured on all the Certificates of Insurance.
- 8.3 The Contractor shall require each Subcontractor employed on the Project to maintain the coverage listed below unless the Contractor's insurance covers activities of the Subcontractor on the Project.
- 8.4No operations under this Contract shall commence until certificates of insurance attesting to the below listed requirements have been filed with and approved by the Department of Public Works, and the Contract approved by the City Manager.
 - a. Workmen's Compensation Insurance
 Limit of Liability \$100,000.00 per accident
 - b. <u>Commercial General Liability</u>

Limits of Liability

Bodily Injury: \$1,000,000.00 per occurrence, \$1,000,000.00 aggregate

Property Damage: \$500,000.00 per occurrence, \$500,000.00 aggregate

Combined Single Limit, Bodily Injury and Property Damage:

\$5,000,000.00 aggregate

c. <u>Automobile Liability</u>

Limits of Liability - \$500,000.00 per accident.

d. The Contractor shall indemnify, defend, and save harmless the City of Rochester and its agents and employees from and against any suit, action or claim of loss or expenses because of bodily injury. Including death at any time resulting there from, sustained by any person or persons or on account of damage to property, including loss of use thereof, whether caused by or contributed to by said City of Rochester, its agents, employees or others.

8.5 ACCIDENT PROTECTIONS

It is a condition of this Contract, and shall be made a condition of each subcontract entered into pursuant to the Contract that a Contractor and any Subcontractors shall not require any laborer or mechanic employed in the performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to health or safety, as determined by construction safety and health standards of the Occupational Safety and Health Administration, United States Department of Labor, which standards include, by reference, the established Federal Safety and Health regulations for Construction. These standards and regulations comprise Part 1910 and Part 1926 respectively of Title 29 of the Code of Federal Regulations and are set forth in the Federal Register. In the event any revisions in the Code of Federal Regulations are published, such revisions will be deemed to supersede the appropriate Part 1910 and Part 1926, and be effective as of the date set forth in the revised regulation.

<u>ARTICLE 9 – COMPLIANCE WITH LAWS</u>

- 9.1 The CONTRACTOR shall at all times, himself, observe and comply with, and cause all his agents and employees to observe and comply with all such laws, ordinances, regulations, orders or decrees; and shall protect and indemnify the OWNER, its officers and agents against all claims or liability arising from or based upon violation of any such law, ordinances, regulations, orders or decrees, whether by himself or his employees.
- 9.2 The CONTRACTOR shall be in compliance with the U.S. Department of Transportation's Federal Motor Carrier Safety Regulations, Parts 49CFR382 and 49CFR383. The CONTRACTOR shall maintain compliance with those regulations from date of contact award to project completion.

As contained herein, the OWNER will negotiate unit prices for the out of scope work with the CONTRACTOR and prepare a change order to the contract that outlines the work to be done, its value, and unit prices of items, not otherwise contained herein.

ARTICLE 10 – NOT TO SUBLET

10.1 The CONTRACTOR shall give his attention constantly to the faithful;; prosecution of the work, shall keep the same under his personal control, and shall not assign by power of attorney or otherwise, nor subcontract the work or any part thereof, with-out the previous written consent of the OWNER, and shall not either legally or equitably assign any of the monies payable under this agreement or his claim thereto, unless by and with the like consent of the OWNER and surety on the Bond.

<u>ARTICLE 11 – TIME OF BEGINNING WORK</u>

- 11.1 It is the intent of this contract to have the CONTRACTOR commence work within the city as soon as practicable upon award of the contract. However, the actual commencement date will be as stated in the Notice to Proceed and all 'date certain' milestones will be agreed upon at that time.
- 11.2 No work shall begin on any city street before 7:00 a.m. and all daily activity shall finish before the hour of 7:00 p.m. unless prior authorization has been granted by the City.

<u>ARTICLE 12 – DELAY BY OWNER</u>

12.1 The OWNER may delay the beginning of the work or any part thereof, if materials or equipment to be furnished by the OWNER are not delivered. The CONTRACTOR shall have no claim for damages on account of such delay, but shall be entitled to such additional time wherein to perform and complete this contract on his part as the ENGINEER shall certify in writing to be just.

ARTICLE 13 – TIME OF COMPLETION

- 13.1 The rate of progress shall be such that work shall be performed and completed in accordance with the terms of this contract.
- 13.2 It is agreed that the rate of progress herein required has been purposely made slow enough to allow for the ordinary delays incident to construction work of this character. No extension of time will be made for ordinary delays, inclement weather and accidents, and occurrences of such will not relieve the CONTRACTOR from the necessity of maintaining the rate of progress.
- 13.3 If delays are caused by acts of god, acts of government or State, strikes, extra work, floods or their contingencies clearly beyond the control or responsibilities of the CONTRACTOR, the CONTRACTOR shall be entitled to as much additional time wherein to perform and complete this contract on his part as the OWNER may grant, after certification thereto by the ENGINEER. The ENGINEER may also delete the work entirely due to unforeseen conditions.
- 13.4 The CONTRACTOR shall provide a schedule to be approved by the ENGINEER. Changes to the schedule should only be made through written documentation. The

CONTRACTOR agrees to exercise diligence in the performance of its services consistent with the agreed upon schedule, subject, however, to the generally accepted standards of care for performance of such services.

13.5 If the schedule cannot be met as outlined, the OWNER will impose penalties in the amount of a REDUCTION OF THE UNIT PRICE BID for line item no. 4 - bituminous concrete according to the following

Time lapsed beyond scheduled milestone	Bid Reduction in dollars per ton
Less than one week	\$0.50 per ton for street in question
One to two weeks	\$0.75 per ton for street in question
Two weeks to one month	\$1.50 per ton per ton for street in question
More than one month	\$3.00 per ton per ton for street in question
Delay such that paving milestone scheduled for CY-2011 is pushed back to CY-2012	\$7.00 per ton per ton for street in question

The basis on whether a penalty is imposed is solely at the discretion of the OWNER. The OWNER has the right to waive assessment of the penalties specified above for the following reasons:

- a) If the CONTRACTOR has begun work and there is mechanical failure to a vital piece of equipment and another can not be brought to the site in a timely fashion.
- b) Weather conditions are such that work cannot be completed in a manner that is in accordance with NHDOT specifications, provided that the work is completed the first business day in which the work can be completed in weather conditions that are in compliance with Paragraph 3.5.2 of Section 401 of NHDOT specifications.
- c) The OWNER has changed the schedule at its sole discretion because it was deemed by the OWNER to be in its self-interest to do so. The OWNER will notify the CONTRACTOR of such occurrences as soon as they are known.

However, if work has begun and is stopped for any reason (including acts of god) the CONTRACTOR is required to take all necessary care to ensure the public safety at all times, (satisfactory to the OWNER), at its own expense. Failure to ensure the public safety (including maintaining reclaimed roadways) may be deemed a breach of contract.

<u>ARTICLE 14 – NIGHT AND SUNDAY WORK</u>

14.1 Night work is generally not to be assumed, however, may be requested by the OWNER. See specifications under Night Work.

14.2 No Sunday work is permitted, except in great emergency, and to such extent that may be necessary.

ARTICLE 15 – EMPLOY COMPETENT PERSONS

15.1 The CONTRACTOR shall employ only competent persons to do the work, and whenever the ENGINEER shall notify the CONTRACTOR in writing that any such persons on the work is, in his opinion, incompetent, such persons shall be discharged from the work and shall not again be employed on it, except with the consent of the ENGINEER.

<u>ARTICLE 16 – LABOR AND EQUIPMENT</u>

16.1 If in the opinion of the ENGINEER the CONTRACTOR is not employing sufficient labor or equipment to complete the contract within the time specified the ENGINEER may, after giving written notice, require said CONTRACTOR to employ such additional labor and equipment as may be necessary to enable said work to properly progress. Failure of the CONTRACTOR to comply in the request of the ENGINEER shall be considered a violation of this contract.

16.2 Wherever it may be written that an equipment manufacturer must have a specified period of experience with his product or equipment and does not meet the specified experience period, may be considered if the equipment supplier or manufacturer is willing to provide a bond or cash deposit for the duration of the specified time period which will guarantee replacement of the equipment or materials in the event of failure.

<u>ARTICLE 17 – LIQUORS AND DRUGS</u>

17.1 The CONTRACTOR shall not sell and shall neither permit nor allow the use of intoxicating liquors or drugs or other materials upon or about the work in this contract.

ARTICLE 18 – ACCESS TO WORK

18.1 The OWNER reserves the right if in his opinion, public health, safety and welfare are jeopardized, to access the work and if necessary to employ forces, not a party to this contract for the correction of hazards or defects in the work performed by the CONTRACTOR and the costs and or performance of such work shall be set forth in Article 27.

ARTICLE 19 – EXAMINATION OF WORK

19.1 The ENGINEER shall be furnished with every reasonable facility for ascertaining that the work is in accordance with the requirements and intention of this contract, even to the extent of uncovering portions of the work.

ARTICLE 20 – DEFECTIVE WORK

20.1 The inspection of the work shall not relieve the CONTRACTOR of any of his obligations to fulfill his contract as herein prescribed and defective work shall be made good and unsuitable material shall be rejected, notwithstanding that such work and materials have been previously overlooked by the ENGINEER and accepted or estimated for payment. If any portions of the work are found to be defective before the final acceptance of the whole work, the CONTRACTOR shall forthwith make good such defects in a manner satisfactory to the ENGINEER, and if any material brought upon the ground for use in the work shall be condemned by the ENGINEER as unsuitable or not in conformity with the specifications the CONTRACTOR shall forthwith remove such materials from the vicinity of the work and make good areas of uncertainty and replaced at the CONTRACTOR's expense to the satisfaction of the ENGINEER.

<u>ARTICLE 21 – MISTAKES OF CONTRACTORS</u>

21.1 The CONTRACTOR shall pay the OWNER, all expenses, losses, and damages as determined by the ENGINEER incurred in consequence of any defect, omission or mistake of the CONTRACTOR or the making good thereof.

ARTICLE 22 – RIGHT TO MATERIALS

22.1 Nothing in this contract shall be constructed as vesting in the CONTRACTOR any right of property in the materials used after they have been affixed to the work or the soil, but all such materials shall, upon being so attached or affixed become the property of the OWNER.

<u>ARTICLE 23 – LIMITATIONS OF WORK</u>

- 23.1 Should the CONTRACTOR consider himself entitled to extra compensation on account of alterations or changes he shall notify the OWNER by making his claim in writing.
- 23.2 Should, in the opinion of the ENGINEER any contemplated change in the quantities of the work or alterations thereof, materially change the character of the work or any part thereof, or materially affect the compensation of the same, then the work shall be considered extra work.

ARTICLE 24 – EXTRA WORK

24.1 The CONTRACTOR shall perform work incidental to the proper completion of the contract. The amount of compensation to be paid to the CONTRACTOR for extra work shall be determined as one of the following:

- 24.1.1 By unit prices, if any as set forth in the contract.
- 24.1.2 If no unit prices are set forth, then by unit prices subsequently agreed upon by Owner and Contractor or by lump sum mutually agreed by the OWNER and the CONTRACTOR; or
- 24.1.3 If no unit prices are set forth and if the parties cannot agree upon unit prices or a lump sum then by the actual net costs in money to the CONTRACTOR as approved by the ENGINEER of the materials ands of the wages of applied labor required for such extra work, plus such rental of plant and equipment (other than small tools) required and approved for such extra work, plus ten percent (10%).
- 24.2 The CONTRACTOR shall furnish itemized statements of costs and tasks associated with each street and submit to the ENGINEER the accounts, bills and vouchers relating thereto.
- 24.3 The fair rental value of all machinery shall be based upon the most recent edition of "Compilation of Rental Rates for Construction Equipment", as published by the Associated Equipment Distributors or similar publication.
- 24.4 In the case of extra work performed by subcontractors whether under the specific contract items provided, or otherwise approved by the ENGINEER the ten percent (10%) added to the reasonable costs of the work will be allowed only to the subcontractor. On such work, an additional five percent (5%) of the reasonable costs (before adoption of ten percent) will be paid to the CONTRACTOR for his work in directing the operations of the subcontractor.

<u>ARTICLE 25 – EXTRA TIME</u>

25.1 When extra work is ordered during the progress of work, which required, in the opinion of the ENGINEER, an unavoidable increase of time for the completion of the contract a suitable extension of completion shall be made, only upon approval of the OWNER.

ARTICLE 26 – CLAIMS FOR DAMAGES

26.1 If the CONTRACTOR claims compensation for any damages for work performed or material furnished in accordance with the terms of this contract or for any other cause, he shall promptly, after sustaining of any damage, make a written statement of the damage sustained, to the OWNER and shall on or before the fifteenth day of the month following that in which the damage shall have been sustained, file with the OWNER an

itemized statement of the details and the amount of damage. Unless such statement is made, his claim for compensation shall be forfeited and invalidated and shall not be entitled to payment on account of any such damage.

ARTICLE 27 – ABANDONMENT OF WORK

27.1 If the work to be done under this contract shall be abandoned, or if this contract or any part thereof shall be sublet without consent by the OWNER or the rate of progress is unreasonably delayed or that the CONTRACTOR has violated any of the provisions of this contract, the OWNER may notify the CONTRACTOR by a written order, with a copy mailed to the home office of the Surety, to discontinue all work or any part thereof and the OWNER may thereupon by contract or otherwise as it may determine, complete the work and charge the entire expense of completing the work; and for such completion the OWNER for itself or its CONTRACTORs may take possession of and use or cause to be used in the completion of the work, and materials, equipment, machinery, implements and tools of every description as may be found at the location of such work.

27.2 This article shall also include emergency situations where the CONTRACTOR is unable to be reached or has been unresponsive to alerts made by the ENGINEER or OWNER. Every effort shall be made by the OWNER to reach said CONTRACTOR; however; all expenses charged under this article shall be deducted and paid by the OWNER out of any monies due or to become due to the CONTRACTOR under this agreement. The OWNER shall not be held to the lowest figures for the work of completing the contract or any part thereof, all sums actually paid therefore shall be charged to the CONTRACTOR. In case the expense so charged exceeds the sum which would have been payable under this contract, the CONTRACTOR shall pay the amount of the excess to the OWNER.

ARTICLE 28 – PRICES OF WORK

281. The OWNER shall pay and the CONTRACTOR shall receive the prices stipulated in the proposal attached hereto as full compensation for everything furnished and done by the CONTRACTOR under this agreement and for faithfully completing the work.

<u>ARTICLE 29 – MONEY MAY BE RETAINED</u>

29.1 The OWNER may keep any monies which would otherwise be payable at any time hereunder and apply the same, or so much may be necessary therefore to the payment of expenses, losses, or damages incurred by the OWNER until all claims are settled, so much of such money as the OWNER shall be of the opinion will be required to settle all claims filed with the OWNER, its officers and agents relating to this contract. Any monies retained shall be placed in a non – interest bearing account.

ARTICLE 30 - MEASUREMENT AND PAYMENT

- 30.1 Any and all work necessary to complete the proposal items should be accounted for by the CONTRACTOR, if for any reason a task(s) to complete a proposal item is not included in these documents it shall be considered incidental to the proposal item. Payment Procedures are described in this Agreement and / or as determined during the Pre-construction meeting.
- 30.2 CONTRACTOR shall be paid according to the items in the bid schedule as successfully completed within a given pay period and with the details outlined in the contract specifications. Payment will be based on the actual amount of work accepted.
- 30.3 Payments to the CONTRACTOR will be made for the actual quantities put in place and accepted in accordance with the Contract Documents. At all times the CONTRACTORs units prices will govern payment, unless a penalty is assessed by the OWNER for not adhering to the agreed upon schedule. The CONTRACTOR shall accept in compensation, as herein provided, in full payment for furnishing all materials, labor, tools, equipment, and incidentals necessary to the completed work and for performing all work including all loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work until its final acceptance by the OWNER. Any retained percentage in no way shall relieve the CONTRACTOR of the obligation to repair or renew any defective parts of the construction or to be responsible for all damage due to such defects.
- 30.4 The City of Rochester will issue separate purchase orders using the line items defined in the Bid Schedule. The City of Rochester, intends for the awarding CONTRACTOR to bill the city directly. The municipality is responsible for paying the CONTRACTOR for services provided as specified in the contract within 45 days of approval of the pay requisition.
- 30.5 When alterations in the quantities of work not requiring a supplemental agreement, as herein before provided for, are ordered and performed, the CONTRACTOR shall accept payment in full at the contract price for the actual quantities of work done. No allowance will be made for anticipated profits.
- 30.6 Should any items contained in the bid form be found unnecessary for the proper completion of the work contracted, the OWNER may eliminate such items from the contract, and such action shall in no way invalidate the contract, and no allowance will be made for items so eliminated in making final payment to the CONTRACTOR.
- 30.7 Partial payments shall be made monthly as the work progresses as pay requisitions are received from the CONTRACTOR. No payments will be made for stored materials.
- 30.8 Final Payment will be due when the CONTRACTOR has completed all work and the CONTRACTOR has submitted all required paperwork. The quality of the work is in

accordance with the Contract Documents and subject to tests as specified under these contract documents.

<u>ARTICLE 31 – SAFETY AND HEALTH REGULATIONS</u>

- 31.1 In order to protect the lives and health of his employees under the contract, the CONTRACTOR shall comply with all pertinent provisions of the Contract Work Hours and Safety Standards Act; and shall maintain all accurate records in all cases of death, occupational disease and injuries requiring medical attention or causing loss of time from work, arising out of and in course of employment on Work under this Contract.
- 31.2 The CONTRACTOR alone is responsible for the safety, efficiency and adequacy of his plant, appliances and methods and for any damage which may result from the failure or the improper construction, maintenance or operation.
- 31.3 The CONTRACTOR shall comply with the requirements of the Occupational Safety and Health Act.

ARTICLE 32 – LIABILITY OF THE OWNER

32.1 No person, firm or corporation, other than the signer of this contract as CONTRACTOR has any interest hereunder and no claim shall be made or to be valid, and neither the OWNER nor any agent of the OWNER, shall be liable for or to be held to pay any money except as herein provided. The acceptance by the CONTRACTOR of the payment of the final payment shall operate as and shall be a release to the OWNER, and every agent of the OWNER, from all claims and liability to the CONTRACTOR for anything done or furnished for or relating to the work, except the claim against the OWNER for the remainder, if any thereby, of the amounts kept or retained as herein provided.

ARTICLE 33 – GUARANTY

- 33.1 The CONTRACTOR guarantees that the work to be done under this contract and the materials to be furnished by him for use in the construction of the same will be free from defects or flaws. This guaranty shall be for a period of one year after the date of acceptance.
- 33.2 It is hereby agreed and understood that this guaranty shall not include repairs made necessary, by any cause other than defective work or materials furnished by the CONTRACTOR. The CONTRACTOR shall at all times within said period of guaranty keep the surface of the ground over his work in the condition required by this contract and refill settlement or erosion due to any cause whatsoever during the work or when directed by the ENGINEER. Should he fail to do so, the OWNER may have said work completed as described in ARTICLE 27.

ARTICLE 34 - RESPONSIBILTY FOR UTILITIES AND SERVICES

- 34.1 At points where the CONTRACTORs operations are adjacent to properties of railway, telegraph, telephone, and power companies or are adjacent to other property, damage to which might result in considerable expense, loss or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.
- 34.2 The CONTRACTOR shall cooperate with the OWNERs of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, and the duplication of rearrangement work may be reduced to a minimum and that service rendered by those parties will not be unnecessarily interrupted.
- 34.3 It shall be the responsibility of the CONTRACTOR to cooperate closely with all utility companies involved and to ascertain the exact locations of all utilities prior to excavation. All existing utilities shall be protected from damage during construction and if damaged shall be repaired by the CONTRACTOR at his own expense.

<u>ARTICLE 35 – TERMINATION</u>

35.1 Upon fourteen calendar (14) days written notice to the CONTRACTOR, OWNER may without cause and without prejudice to any other right of remedy, elect to abandon the project and terminate the agreement. In such case, CONTRACTOR shall be paid for all work executed at the contract prices and for any expense sustained plus reasonable profit.

STATEMENT OF BIDDER'S QUALIFICATIONS

Complete the following questions relative to bidder's qualifications. All questions must be answered and the data given must be clear and comprehensive. This form must be notarized. If necessary, add separate sheets.

1.	Name of Bidder:
2.	Permanent Main Office Address:
3.	When Incorporated:
4.	Where Incorporated:
5.	How many years have you been engaged in the contracting business under your present firm name?
6.	Contracts on hand: (Attach list showing project title, project location, and gross amount of each contract and the approximate anticipated dates of completion.)
7.	General character of work performed by your company.
8.	Have you ever failed to complete work awarded to you? YES NO
	If yes, where, when and why?
9.	Have you ever defaulted on a contract? YES NO
	If so, where, when and why?
10.	List the more important projects recently done by your company, stating approximate cost for each, the month / year completed primary OWNERs contact / telephone number.

11.	equipment schedule if necessary.)	FOR THIS CONTRACT. (Attach	
12.	Experience in construction work similar	in importance to this project.	
13. conta	With what banks do you do business? Institutions? YES	Do you grant the OWNER permis	ssion to
14.	If your answer to Number 13 is NO, plea	ase explain why.	
14.	How do you intend to meet the schedule	e described in the Scope of Work?	
15.	If you intend to hire subcontractors to downom?	any part of the work, please spec	ify
NAME	OF BIDDER		
		BY: Authorized Signature	
		Name	
		Title	
		STATE OF ()) SS.
		COUNTY OF () 33.)

I,	, a Notary Public in and for said County,
in the State aforesaid, DO HEREBY CERTIF	Y that
, person	ally known to me to be the same person
whose name is subscribed to the foregoing in person, and acknowledged that they signed, as their free and voluntary act, for the uses a	sealed and delivered the said instrument
GIVEN under my hand and Seal this	lay of , 2005.
Notary Public	
My Commission Expires	

NOTICE OF AWARD

То:						
PROJ	ECT D	escription: 2011 Pa	ving Projects.			
					for the above-described, and Information	
of \$		re hereby notified th	nat your BID ha	s been accepte	d for items in the amour	ıt
		terms and schedul paid according to t measurement and unless modified by	es as stipulated he line item pri payment sched the penalty cla fied unless mo	d in the contract ces bid in accor dule described in auses of the con dified in writing	are expected to meet the documents. You will be dance with the n these bid documents, tract for failure to meet by the City ENGINEER	
the re	quired		erformance BC	ND, Payment E	Agreement and furnish BOND and certificates of tice to you.	f
from t arising	he date g out of	e of this Notice, said f the OWNER's acce	OWNER will be ptance of your	e entitled to cor BID as abando	eS within five (5) days nsider all your rights oned and as a forfeiture this as may be granted by	
You a OWN	•	uired to return an ac	knowledged co	py of this NOTI	CE OF AWARD to the	
Dated	I this _	day	v of	_, 2011		
				(0	OWNER)	
				Ву		
				Title		

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged.

By		
This the By	day of	
Title		

NOTICE TO PROCEED

To: Date:		
Project: City of Rochester 2011 Paving Projec	ets	
You are hereby notified to commence V dated, 2, on or land you are to fully complete the WORK by Od The Contract provides for an assessme damages for each consecutive calendar day a date that the WORK remains incomplete after penalties described in Article 13.	before ctober 28, 2 int of the su fter the est	2011. um of \$750 as liquidated ablished Contract completion
Dated this day of		, 2
		(OWNER)
	litle	
ACCEPTANCE OF NOTICE		
Receipt of the above NOTICE TO PROCEED is hereby acknowledged by		
This theOf	_, 2	
By		
Title		

SPECIFICATIONS

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ASPHALT RECLAMATION

ITEM 1 -

BID PAY ITEMS

ITEM 1 - ASPHALT RECLAMATION

SPECIFICATION 1.1

The quantity of pavement reclamation under this item shall be measured as the area of pavement fully reclaimed in square yards.

SPECIFICATION 1.2

Payment to complete pavement reclamation shall be at the unit price per square yard as stated in the Bid Proposal. Payment under this item includes all equipment, labor, scarifying, pulverizing, excavation, screening, handling, rough grading, of reclaimed material, placement of additional gravel materials and removal of all excess material as required to meet the reclaim material specification and all else necessary to complete the item. No work shall be done outside of normal working hours, unless agreed upon by the OWNER. No additional costs will be incurred by the OWNER for this work.

SPECIFICATION 1.3

Standards shall be the NHDOT <u>Standard Specifications for Bridges and Highway Construction</u>, Section 306, Section 304.3.6 and AASHTO T 164.

Weather limitations shall be as indicated in NHDOT "Standard Specifications", Section 306.3.11.2.

SPECIFICATION 1.4

Equipment required for this Section must have the capability of changing forward speed and the depth of cut; be equipped with four wheel drive; perform in forward and reverse; have a cutting rotor with a minimum width of 8'; capable of cutting and pulverizing in both the up and down directions; and have a minimum capability of pulverizing to a minimum depth of 12". Process reclaimed pavement using scarifying or planing mill equipment. Rock crushers shall not be allowed as alternate equipment.

SPECIFICATION 1.5

The reclaimed material shall consist of the pulverized existing pavement and blended with the underlying gravel base with additional crushed gravel, as determined by the Contract Monitors.

Reclaim material shall conform to the following gradation of finished materials:

Sieve Size	Percent Passing By Weight	
3"	100	
1-1/2"	80-100	
3/4"	55-90	
#4	40-70	
#200	3-10 (Total Sample)	

Conform to Section 02223- Roadway Excavation, Backfill, and Compaction, 2.0.1 E. and Section 304 of the NHDOT "Standard Specifications" for additional crushed gravel gradation.

Conform to NHDOT "Standard Specifications" for liquid calcium chloride (CaCl₂).

Gradation shall be determined by AASHTO T164.

SPECIFICATION 1.6

Lower or remove all utility castings, prior to the start of any work taking note of locations. Protect specific utilities to assure access to water mains, gravity sewers, storm drainage and any other utility during construction from machines and debris.

The limits of pavement reclamation are generally from pavement edge to pavement edge or as directed by the Contract Monitors. The pavement depths may vary along the length of the roadways of the Project.

The CONTRACTOR will furnish all necessary controls to govern grading and crowning within the required limit.

Pulverize or scarify pavements and base gravel to provide a consistent reclaimed material in accordance with Standards shall be the NHDOT <u>Standard Specifications for Bridges and Highway Construction</u>, Section 306.

The OWNER reserve the right to determine the depth based on conditions presented during the initial pass of the reclaim machinery.

The reclaim process shall consist of two (2) passes with the reclaim machinery. During the second reclaim pass, liquid calcium chloride (CaCl₂) shall be applied at a rate of 0.25 gallon per square yard. The reclaim material shall be graded and compacted. After the finish grade has been established, a final application of liquid calcium shall be made at a rate of 0.25 gallons per square yard.

Blend in existing driveway aprons to maintain slope and ease of use; using excess reclaimed materials and or additional gravel as needed.

Excess reclaimed materials shall remain the property of the OWNER. The CONTRACTOR shall remove all excess material to a storage location to be determined by the OWNER. No separate pay item will be made for the transportation of such material within city limits.

If the material is deemed to be unsuitable (See Specification - Item 5) by the OWNER or representatives then; remove and replace with a minimum of six inches (6") of 1 ½" crushed gravel sub base, grade to provide a two percent (2%) crown and compact. Compaction tests (one (1) visit) will be performed by the City's testing company at the OWNER's expense and all areas shall meet ninety five percent (95%) or greater. Any failed areas shall be corrected and retested at the CONTRACTORs expense. After fine grading to finish grade has been completed, an application of liquid calcium chloride shall be made at a rate of 0.25 gallons per square yard.

ITEM 2 - COLD PLANING

SPECIFICATION 2.1

Cold planing of asphalt pavement will be measured by the square yard and shall be assumed to be one and a half inch (1.5") depth, unless otherwise specified.

SPECIFICATION 2.2

The accepted quantities of cold planing of asphalt surfaces to the nominal depth specified will be paid for according to the contract unit price per square yard. Night work may be requested, however, no separate payment will be made for any costs of project lighting or overtime necessary due to night operations.

SPECIFICATION 2.3

Cold Planing will be performed according to NHDOT specification Section 417¹, shimmed to grade as necessary and topped one with the specified quantity of hot mix asphalt applied according to NHDOT specifications Sections 401, 403, and 410. Cold Planing shall be performed at all driveways and street tie in's as necessary or specified by the OWNER.

SPECIFICATION 2.4

Equipment used for planing of bituminous surfaces shall be a power-operated rotary planing or milling machine capable of uniformly removing the existing bituminous surface.

¹ From Standard Specifications for Road and Bridge Construction, as published by the State of New Hampshire Department of Transportation, 2002 edition.

SPECIFICATION 2.5

All milled material shall be used within the project for shims or transported within the City Limits to be stockpiled for the City's future use. The transportation of the product should be considered incidental to the Cold Planing operation.

SPECIFICATION 2.6

Cold Planing will be performed at all construction joints where reclaiming has taken place for approximately 20 LF to tie the wearing course into the existing pavement. As a standard the City would like all joints including driveways within the limit of work roadway to be milled unless otherwise specified or Cold Planing is unattainable or undesirable. All structures are to be protected from the milling operation and free of debris.

ITEM 3 - CRUSHED GRAVEL FOR BASE

SPECIFICATION 3.1

Roadbed base course of crushed gravel will be measured by the cubic yard of compacted material placed within the defined roadway in place as specified by the OWNER.

Gravel for leveling of driveway aprons will be measured by the cubic yard of compacted materials placed as necessary to maintain slope or smooth transitions.

SPECIFICATION 3.2

The contract pay quantities, plus or minus quantity modifications authorized by the OWNER of roadbed base course materials of crushed gravel will be paid for at the contract unit price per cubic yard in place. The accepted quantities of gravel or crushed gravel for driveway aprons will be paid for at the contact unit price per cubic yard in place. The conversion factor for converting between tons and cubic yards shall be 1.5 tons per 1 cubic yard.

SPECIFICATION 3.3

Aggregate subbase shall be installed in accordance with Section 02616 Reclaim Bituminous Concrete Pavement and Section 02223 - Roadway Excavation, Backfill and Compaction; and NHDOT "Standard Specification", Sections 203, 304 and 306.

SPECIFICATION 3.4

In order to expedite the testing of materials the CONTRACTOR should notify the OWNER of the proposed sources of material before delivery. The OWNER has the option of conditionally approving materials at the supply source. Any material incorporated into the work which subsequently fails to meet the contract requirements

shall be corrected to the satisfaction of the OWNER or removed in its entirety. The material shall meet the standard of Section 306.

Permission may be given to substitute a fine gradation for crushed gravel.

Refer to Section 02616 Reclaim Bituminous Concrete Pavement and Section 02223 - Roadway Excavation, Backfill and Compaction.

A. Aggregate subbase shall be installed in accordance with Section 02616 Reclaim Bituminous Concrete Pavement and Section 02223 - Roadway Excavation, Backfill and Compaction; or NHDOT "Standard Specification", Sections 203 and 304.

<u>ITEM 4 – BITUMINOUS CONCRETE</u>

SPECIFICATION 4.1

Plant mix bituminous pavement mixture will be measured by the ton to the nearest 0.1 ton, and in accordance with Section 109.01 of NHDOT Standard Specification for Road and Bridge Construction. That quantity will be the weight used in the accepted pavement, and no deduction will be made for the weight of bituminous material or additives in the mixture or plant mix bituminous pavement removed because of faulty workmanship or contamination.

SPECIFICATION 4.2

The accepted quantities of hot bituminous pavement will be paid for at the contract price per ton for the bituminous mixture, complete in place. Emulsified asphalt for tack coat required will be subsidiary to the paving items. Measurement for payment shall be by the actual number of tons in place based on either load slips collected and verified in the field by the Contract Monitor or Inspection ENGINEER. Payment includes bituminous concrete material, hauling, placing, compacting, sweeping, cleaning, and all else necessary to complete the items. (Analogous to Pay Item 403.11¹)

SPECIFICATION 4.3

Standards shall be the New Hampshire <u>Standard Specifications for Bridges and Highway Construction</u>, Division 400, hereinafter referred to as NHDOT "Standard Specifications".

Pavement supplier and Plant shall be as specified in NHDOT "Standard Specifications" Section 401.3.1.

Material certificates shall be signed by producer and CONTRACTOR stating that each material complies with specified requirements.

Design mix provisions for each type of pavement specified to be submitted seven (7) days in advance of paving.

Certified weigh slips submitted for each truckload of bituminous concrete materials delivered and placed.

Weather limitations shall be as indicated in NHDOT "Standard Specifications" Section 401.3.5.

Base course placement shall be placed when the temperature of the subbase is forty (40) degrees F. and rising.

Wearing course placement shall be when the temperature of the base course is forty (40) degrees F. and rising.

SPECIFICATION 4.4

ASPHALT CEMENT- Grade as specified to comply with Section 702 of the NHDOT "Standard Specifications".

BITUMINOUS CONCRETE PAVEMENTS

- A. Comply with the material requirements NHDOT "Standard Specifications", Section 401.
- B. <u>Base Courses</u> (Binder): Type-B.
- C. Wearing Course: Type-E. (1/2" agg / type F 3/8 agg)???
- D. Shims: Type-F.
- E. <u>Overlay</u>: Type-E.
- F. Sidewalk (1 course): Type-E
- G. <u>Walkway (1 course)</u>: Type-E
- H. <u>Driveway Aprons</u>: Type-E (Hand placed)

BITUMINOUS TACK COAT

- A. Comply with NHDOT "Standard Specifications" Section 410.
- B. Grade: RS-1.

SPECIFICATION 4.5

Prior to application of shims / overlays and wearing pavement ensure all pavements are clean and free of debris by sweeping or blowers to the satisfaction of the OWNER.

Prior to application of wearing surface, raise utility casings to final grade. Between raising and the application of pavement, the edge of the utility casing will be painted with fluorescent orange paint.

Transverse joints with existing pavement shall be cut back at a depth sufficient to allow placement of new pavement at the specified depth.

All utility covers and edges of existing pavement shall be painted with a suitable bituminous coating.

Pavement courses shall be spread continuously by a suitable paving machine to line, grade and thickness specified.

Paving machines and compaction rollers shall meet the minimum requirements of the NHDOT "Standard Specifications", Section 401.3.6.

Permanent Bituminous Concrete base course shall be placed to a compacted thickness as noted in the Section entitled "The Projects" or as directed by the CONTRACT MONITORS. In areas that have been reclaimed, the base course pavement shall be placed no later than seven (7) days following final completion of the reclamation, fine grading and compaction process.

Permanent Bituminous Concrete wearing course shall be placed to a compacted thickness as noted in the Section entitled "The Projects" or as directed by the CONTRACT MONITORS.

Sidewalk Bituminous Concrete single course shall be placed to a compacted thickness as noted in the Section 02775 or as directed by the CONTRACT MONITORS.

Apply tack coat, as required or at the direction of the CONTRACT MONITORS, immediately prior to paving against curbing, gutters, manholes, existing pavement and on cold planned areas for adequate bond. Apply tack to all areas necessary and existing weathered pavement at a rate of 0.5 to 2.0 gallons per square yard.

<u>ITEM 4A – BITUMINOUS CONCRETE - NIGHT WORK</u>

SPECIFICATION 4A.1

This is a per night premium cost and should cover all extra costs necessary to complete Item #4 – Bituminous Concrete as specified. All costs associated with nighttime paving operations shall be included in the item. This is a total premium rate for all equipment, plant, men and traffic control (excluding officers).

SPECIFICATION 4A.2

The agreed upon work (nights) shall be paid accordingly per the schedule of values in the bid schedule. No nighttime work shall proceed without prior written authorization from City personnel. Agreed upon start times and the amount of work to be completed shall be included. This pay item is not to be used for extra time, the extension of daytime activities or for compensation in any way other than described.

If for any reason a date is scheduled then canceled without prior notice, the CONTRACTOR shall assume the costs of any officers and city personnel.

If for any reason out of the City's control, the agreed upon work is not completed within the time frame allotted or the CONTRACTOR fails to complete the agreed upon work in its entirety, then the CONTRACTOR is not entitled to the item.

ITEM 5 - BASE PREPARATION, COMPACTION AND FINE GRADING

SPECIFICATION 5.1

Base preparation, which includes compaction of reclaimed material and road base gravels, and fine grading, will be measured by the square yard.

Site information data on subsurface conditions are not intended as representations or warranties of accuracy or continuity between borings or test pits. It is expressly understood that the OWNER will not be responsible for interpretations or conclusions drawn there from by the CONTRACTOR. The CONTRACTOR may make additional test borings, or test pits with prior approval of the Contract Monitors. Payment for exploratory excavations approved by the Contract Monitors shall be paid for under the contract unit price.

Exploratory test pits shall be excavated as directed by the Contract Monitors. Comply with the requirements for backfilling and compacting under this Section.

SPECIFICATION 5.2

The accepted quantities will be paid for at the unit price per square yard and will include supplying the equipment necessary to complete the tasks.

Guard rails, curbing, drainage grates, utility boxes, signs, mailboxes, shrubs and trees in the area of the Work shall be protected, either by guarding or temporary removal and replacement. If damage occurs, repairs shall be completed using materials equal to that existing prior to construction. Repair costs for damaged items shall be the responsibility of the CONTRACTOR.

Construction in the vicinity of utilities that endangers poles, pipes or conduits shall not proceed until the respective utility has been notified. Costs incurred as a result of the CONTRACTOR's negligence or failure to cooperate with a utility shall be borne solely by the CONTRACTOR.

Fees charged for holding of poles, temporary relocation of power, support or guarding shall be paid for by the CONTRACTOR.

SPECIFICATION 5.3

The OWNER shall pay for aggregate gradation analyses. The OWNER shall pay moisture maximum density tests and compaction test fees. The CONTRACTOR shall pay retesting for any failed tests.

Surfaces under paved areas shall be shaped to grade, line and cross section within one half (1/2) -inch positive or negative tolerance relative to sub grade elevations.

Reference Standard shall be the <u>New Hampshire Standard Specifications for Bridge and Highway Construction</u>, hereinafter called NHDOT "Standard Specifications".

Rolling and shaping of successive roadway gravel base lifts shall be done parallel to roadway centerline and continue until each layer conforms to the required grade and cross-section.

Degree of Compaction shall be in accordance with the following minimum densities:

Material Density requirements shall be field determined in accordance with ASTM D1556/AASHTO T191 (Sand Cone) or ASTM D2922/AASHTO T238-239 (nuclear method). Maximum density shall be determined by ASTM D698/AASHTO T99, Standard Proctor.

Frequency of testing shall be determined by the Contract Monitors based upon the CONTRACTOR's notification of completed areas. An independent laboratory will make tests. The recommended minimum number of test shall be in accordance with the following guidelines:

1. Roadway: 1 for every 100 linear feet of roadway. Highway trench (below pavement): 1 for every 200 linear feet of trench lift.

Contract Monitors may modify these guidelines upon field conditions and observations.

The CONTRACTOR shall notify the OWNER 24 hours in advance before testing is to occur.

The CONTRACTOR shall pay for density tests resulting from materials changed by the CONTRACTOR or failures.

Material that does not meet the minimum density requirements shall be reworked in accordance with the NHDOT Standard Specifications or removed and replaced, at the CONTRACTOR's expense, with acceptable material.

SPECIFICATION 5.4

Compaction of roadway gravels shall be done with an approved vibratory roller, producing a dynamic force of at least 27,000 pounds in a twelve (12)-inch lift unless otherwise specified by the OWNER.

Compaction of roadway crushed ledge rock shall be done with an approved vibratory roller producing a dynamic force of 27,000 pounds in a twelve (12)-inch lift.

SPECIFICATION 5.5

Unsuitable Material shall consist of deposits of saturated or unsaturated mixtures of soils and organic matter not suitable for foundation material regardless of moisture content.

Unsuitable material shall also consist of any material containing excessive plastic clay, vegetation, debris, pavement, stones or boulders over six inches (6") in greatest dimension, which, in the opinion of the ENGINEER, will not provide a suitable foundation or sub grade.

A. Bank run Gravel is characterized as hard, durable stone with coarse to fine sand. Sieve analysis by weight:

Sieve Size	% Passing by Weight
6"	100%
No. 4	25-70%
*No. 200	0-12%
*(Based on the frac	ction passing No. 4)

Sand shall consist of clean, sharp mineral particles free of organic matter. B. Sieve size as follows:

Sieve Size	% Passing by Weight
6"	100%
No. 4	70-100%
*No. 200	0-12%
*(Based on the fra	ction passing No. 4)

Coarse Crushed Bank run Gravel particle size limits are as follows: C.

<u>Sieve Size</u>	% Passing by Weight	
3 inch	100%	
2 inch	95-100%	
1 inch	55-85%	
No. 4	27-52%	
*No. 200	0-12%	
*(Based on fraction passing No. 4)		

D. Fine Crushed Bank run Gravel particle size limits are as follows:

Sieve Size	% Passing by Weight	
2 inch	100%	
1 inch	90 – 100%	
No. 4	30 - 60%	
No. 100	0 - 12%	
No. 200	0 - 6%	

E. <u>Crushed Stone</u> shall be clean angular rock fragments obtained by breaking and crushing rock material. Sieve analysis by weight:

Sieve Size	% Passing by Weight		
	3/4" Stone	1 1/2" Stone	
2 inch		100%	
1 1/2 inch		30-100%	
1 inch	100	0-30%	
3/4 inch	95-100	0-5%	
1/2 inch	0-25		
3/8 inch	0-2		

F. <u>Pea Stone</u> shall be naturally round aggregate; 1/4" nominal size and meet ASTM C-33 stone size No. 89 specifications. Sieve analysis by weight:

Sieve Size	% Passing by Weight	
1/2 inch	100%	
3/8 inch	90-100%	
No. 4	20-55%	
No. 8	5-30%	
No. 16	0-10%	
No. 50	0-5%	

G. Shoulder Stone/Hardpack particle size limits are as follows:

Sieve Size	<u>% PASSING BY WEIGHT</u>
1-1/2 inch	100%
1 inch	90 - 100%
No. 4	30 - 65%
No. 200	0 - 10%

All material not herein specified, but necessary for completion of the Work shall conform to the requirements of the New Hampshire Standard Specifications for Highway and Bridge Construction.

Refill material for excavation below grade in ledge shall be coarse crushed gravel or as shown on the Drawings. For refill of unsuitable material removed at the direction of the ENGINEER, Common or Select Backfill shall be used as directed by the ENGINEER.

Select backfill, where required, shall be coarse crushed gravel as specified above, unless directed otherwise by the ENGINEER.

SPECIFICATION 5.6

Place suitable material in layers to the required elevations as shown on the Drawings and as listed below.

Gravel roadway base courses shall be placed in 8" maximum lifts and thoroughly compacted, as required, prior to successive lifts. Do not place backfill or fill material on surfaces that are muddy, frozen or frost or ice.

Replacement of unsuitable materials below normal grade shall be in accordance with Item 3 – Crushed Gravel for Sub Base.

Dust Control shall be ongoing throughout the work areas and adjacent off site stockpile areas or as directed. Dust shall be controlled by water or calcium chloride.

During placement of roadway gravels and fine grading storm water drainage entrances shall be closed when rain is threatening. Direct resulting run-off to maximize collection of sediment.

Traffic Control shall be maintained at all times to MUTCD standards. If at anytime traffic control is not to the standards the OWNER may order corrections and stoppage of work until proper standards can be obtained by the CONTRACTOR. Any loss of production is to be born directly by the CONTRACTOR. If night work is authorized and agreed upon sufficient traffic control must be in place prior to any work commencing.

SPECIFICATION 5.7

Fine grading shall consist of the final grading required to level the sub grade, base and surface course to limits within the specified tolerances indicated in paragraph Specification 5.3

Gravel base courses shall be placed in eight (8) inch maximum lifts and thoroughly compacted as required prior to successive lifts. Care shall be taken to prevent separation of granular materials during placement. Segregated materials shall be removed and replaced using methods calculated to reduce the separation of aggregates.

SPECIFICATION 5.8

Disposal of surplus materials shall be at the express direction of the Contract Monitors. Surplus excavated materials shall be stockpiled at an approved location.

Unsuitable excavated materials such as boulders, rock, muck and fill contaminated with stumps, roots and organic debris shall be disposed of at the direction of the Contract Monitors.

Disposal, stockpiling and re-use of excavated material shall be considered a cost incidental to Common Excavation.

ITEM 6 – HAND PAVING

SPECIFICATION 6.1

Plant mix bituminous pavement mixture will be measured by to the nearest 0.1 ton, and in accordance with Section 109.01 of NHDOT Standard Specification for Road and Bridge Construction. That quantity will be the weight used in the accepted pavement, and no deduction will be made for the weight of bituminous material or additives in the mixture. Plant mix bituminous pavement, removed because of faulty workmanship or contamination.

SPECIFICATION 6.2

The accepted quantities of hot bituminous pavement will be paid for at the contract price per ton for the bituminous mixture, complete in place. Emulsified asphalt for tack coat required will be subsidiary to the paving items. Measurement for payment shall be based on load slips collected and verified in the field by the Contract Monitor or Inspection ENGINEER. Payment includes bituminous concrete material, hauling, placing, compacting, sweeping, cleaning, and all else necessary to complete the items. (Analogous to Pay Item 403.12¹)

SPECIFICATION 6.3

Standards shall be the New Hampshire <u>Standard Specifications for Bridges and Highway Construction</u>, Division 400, hereinafter referred to as NHDOT "Standard Specifications".

Pavement supplier and Plant shall be as specified in NHDOT "Standard Specifications" Section 401.3.1.

Material certificates shall be signed by producer and CONTRACTOR stating that each material complies with specified requirements.

Certified weigh slips submitted for each truckload of bituminous concrete materials delivered and placed.

Weather limitations shall be as indicated in NHDOT "Standard Specifications" Section 401.3.5.

Base course placement shall be placed when the temperature of the Sub-base is 40 degrees F. and rising.

Wearing course placement shall be when the temperature of the base course is 40 degrees F. and rising.

SPECIFICATION 6.4

ASPHALT CEMENT- Grade as specified to comply with Section 702 of the NHDOT "Standard Specifications".

Comply with the material requirements NHDOT "Standard Specifications", Section 401.

Base Courses (Binder): Type-B.

Wearing Course: Type-E.

<u>Driveway Aprons</u>: Type-E (Hand placed)

BITUMINOUS TACK COAT

A. Comply with NHDOT "Standard Specifications" Section 410.

B. Grade: RS-1.

SPECIFICATION 6.5

Prior to application of the wearing pavement ensure all driveway slopes in harmony with the roadway to alleviate ponding or water flow out of the city right of way to private property. When driveways conflict with the roadway design special adjustments may be necessary to achieve the necessary slope to obtain the desired results. The CONTRACTOR should make himself aware of such conditions prior to the final wearing course being installed. If the CONTRACTOR is made aware of such conditions and does not take appropriate action payment may be withheld until remedies are put in place to solve such problems.

The City is aware that all conditions cannot be seen, however, requests the due diligence and expertise of the CONTRACTOR. The City will make every effort to work with the CONTRACTOR to try and mitigate such issues.

Pavements and sub base shall be clean and free of debris by sweeping or blowers to the satisfaction of the OWNER.

Prior to application of wearing surface, raise all utility casings to final grade including gas and water curb stops if any.

Transverse joints with existing pavement shall be cut back at a depth sufficient to allow placement of new pavement at the specified depth.

Pavement courses shall be spread continuously to line, grade and thickness specified.

Paving machines and compaction rollers shall meet the minimum requirements of the NHDOT "Standard Specifications", Section 401.3.6.

Sidewalk Bituminous Concrete single course three inches (3") or as directed by the CONTRACT MONITORS. See Specification 4.4

ITEM 7 - PAVEMENT STRIPING

SPECIFICATION 7.1

Retro reflective pavement marking lines of the type and width specified by the OWNER will be measured by the linear foot to the nearest foot of length of marking applied. Double yellow lines and combination solid/broken lines will be measured as separate lines according to the length of each individual marking applied.

Measurement for payment shall be as jointly measured and approved by the CONTRACTOR and Contract Monitor/Inspection ENGINEER based on existing field conditions

SPECIFICATION 7.2

The accepted quantities of retro reflective pavement marking lines of the type and width specified will be paid for at the contract unit price per linear foot complete in place.

SPECIFICATION 7.3

Standards shall be the New Hampshire <u>Standard Specifications for Bridges and Highway Construction</u>, Division 600, hereinafter referred to as NHDOT "Standard Specifications".

SPECIFICATION 7.4

- A. Paint shall conform to 708-NH 4.11 White Traffic Paint or 708-NH 4/12 Yellow Traffic Paint or current standard as adopted by NHDOT.
- B. Glass Beads shall conform to 708-NH 4.13 and shall be Type 1 with a moisture resistant coating.

SPECIFICATION 7.5

- A. Only collector roads and arterials will have pavement markings applied. The following streets that are subject to this contract are considered either collector roads or arterials.
 - Salmon Falls Road
 - Whitehall Road
 - Governors Road
- B. Stop bars shall be painted at stop signs of all streets following the application of the wearing course of pavement.

C. Pavement markings will be required on all collectors and arterial streets following the binder course if the OWNER's intent is to have the binder pavement exposed during the winter months. Temporary pavement markings will be required and funded by the CONTRACTOR if the CONTRACTOR cannot install the wearing course within 3 days of placing the base course of pavement. All pavement markings will be required following the application of the wearing course.

- D. The CONTRACTOR will be required to note the location and patterns of pavement markings existing before the markings are removed or obliterated and shall replicate them following the application of pavement, unless a modification is ordered by the OWNER.
- E. All collector and arterial streets shall have fog lines applied, if they are not present already.

ITEM 8 – PAVEMENT MARKINGS

SPECIFICATION 8.1

Retro reflective (thermo plastic) pavement marking symbols or words of the type specified will be measured by the square foot, to the nearest 1 square foot of area applied, based on established areas where existing pavement markings occurred prior to the obscuring the existing pavement by either reclaiming, cold planing, or overlaying or in locations specified by the OWNER.

Measurement for payment shall be as jointly measured and approved by the CONTRACTOR and Contract Monitor/Inspection ENGINEER based on existing field conditions

SPECIFICATION 8.2

The CONTRACTOR will be required to note the location and patterns of pavement markings existing before the markings are removed or obliterated and shall replicate them following the application of pavement, unless a modification is ordered by the OWNER.

ITEM 9 – GRAVEL SHOULDERS

SPECIFICATION 9.1

Crushed gravel for shoulder leveling will be measured by the cubic yard determined by using 80 percent of the loose volume material measured in vehicles in accordance with Section 109.01 of NHDOT Standard Specification for Road and Bridge Construction.

Gravel and crushed gravel for leveling of driveway aprons will be measured by the cubic yard of compacted materials placed at the direction of OWNER.

SPECIFICATION 9.2

The contract pay quantities, plus or minus quantity modifications authorized by the OWNER of roadbed base course materials of crushed gravel or crushed aggregate for shoulders or crushed stone for base course will be paid for at the contract unit price per cubic yard complete in place. The conversion factor for converting between tons and cubic yards shall be 1.5 tons per 1 cubic yard.

ITEM 10 - SAW CUT PAVEMENT

SPECIFICATION 10.1

Sawed pavement of the type specified will be measured by the linear foot.

SPECIFICATION 10.2

The accepted quantity of sawed pavement will be paid for at the contract unit price per linear foot. (Analogous to Pay Item 628.2¹)

ITEM 11 - MOBILIZATION

SPECIFICATION 11.1

Mobilization is based on delivering / moving and storing all the necessary equipment and materials to each location.

SPECIFICATION 11.2

Mobilizations will be paid on an each basis to move all the necessary equipment to complete the tasks per the schedule. Equal partial payments will be made per site and the total lump sum bid price shall be divided equally among the schedule of work. The amount within the Lump Sum should cover all costs associated with every aspect of preparation through final paving and stripping. No separate payments will be made for specialized equipment or to replace damaged equipment and or any future mobilizations as required by the CONTRACTOR for repairs or damage.

SPECIFICATION 11.3

This is a Lump Sum total item; however, the item will be paid out at an 80/20 rate of the equal partial payments. 80% of the amount shall be paid at the start of mobilization and 20% will be paid upon completion of the entire task for a site within the contract. If for any reason the schedule is not completed and future work is deleted from the contract, the CONTRACTOR is not entitled to the entire Lump Sum quantity only the value of tasks that have been completed.

ITEM 12 - OFFICERS

SPECIFICATION 12.1

Uniformed officers will be measured by the actual numbers of hours authorized, as determined by the contract monitor/inspection ENGINEER. The CONTRACTOR is required to schedule the utilizing of all uniformed officers. Officers shall be present when in the opinion of the ENGINEER, OWNER or deputy police chief and in all instances where operations are occurring during night time hours and shall confirm to the NHDOT Specifications for Highways and Bridges section 618.

SPECIFICATION 12.2

The hours authorized for uniformed officers will be paid for at the invoice value plus 5%. The set amount in the proposal is not a lump sum, but is a contract allowance for bidding purposes and only the dollar value as authorized will be paid.

ITEM 13 - MAINTENANCE OF TRAFFIC

SPECIFICATION 13.1

Maintenance of traffic will be measured as a unit for the project and will be paid for in equal partial payments for each required task. The item should include all necessary devices and personnel to handle the volume of traffic and work to be performed and confirm to NHDOT Specification for Highways and Bridges, section 618 and 619. (Before mobilization, the CONTRACTOR will submit for approval a traffic management plan). Tapers and lane shifts shall be such to confirm with all NHDOT standards. If for any reason the OWNER / ENGINEER is of the opinion that care is not being taken to ensure public safety he may stop the work until corrective measures are taken. It is assumed that flaggers will be required on all streets, at all times (regardless of the presence of details) that work is being performed and should be carried within the item.

SPECIFICATION 13.2

This is a unit item and will be paid out at a 60/40 rate of the equal partial payments. 60% of the amount shall be paid at the start of the work and 40% will be paid upon completion of the entire task for a site within the contract. If for any reason the schedule is not completed and future work is deleted from the contract, the CONTRACTOR is not entitled to the entire unit quantity.

Guard rails, curbing, drainage grates, utility boxes, signs, mailboxes, shrubs and trees in the area of the Work shall be protected, either by guarding or temporary removal and replacement. If damage occurs, repairs shall be completed using materials equal to that existing prior to construction. Repair costs for damaged items shall be the responsibility of the CONTRACTOR.

Construction in the vicinity of utilities that endangers poles, pipes or conduits shall not proceed until the respective utility has been notified. Costs incurred as a result of the

CONTRACTOR's negligence or failure to cooperate with a utility shall be borne solely by the CONTRACTOR.

Fees charged for holding of poles, temporary relocation of power, support or guarding shall be paid for by the CONTRACTOR.

ITEM 14 – REPLACEMENT OF TRAFFIC SIGNAL LOOP DETECTORS

SPECIFICATION 14.1

This work shall consist of furnishing and installing (saw cuts) all necessary fittings, cables and components in accordance with MUTCD and City of Rochester standards.

SPECIFICATION 14.2

The accepted quantity of traffic signal loop detectors will be paid for at the contract unit price to complete the unit in place and operational. All work shall comply with the NHDOT Specifications for Highways and Bridges, section 616.

SPECIFICATION 14.3

If any loop detection system is interrupted; the CONTRACTOR must notify city personnel. Splices are not allowed in the final condition and should only be considered on a temporary basis if necessary. All loop installations shall be made without damage to the wire or its insulation. All damaged wire shall be replaced.

Prior to pouring sealant, the detector loop and lead in cable shall be checked for continuity, inductance, resistance and integrity of insulation. This test shall be made in the presence of the ENGINEER. The CONTRACTOR shall replace any portion or all of the system until proper readings is obtained.

Saw cut sealant shall be approved flexible embedding sealant as included in the NHDOT approved product list by the Bureau of Materials and Research used strictly in accordance with the manufactures instructions. The sealant shall be poured into the slot to half depth, checked for air bubbles or material pile up, and then filled to the roadway level. Excess sealant shall be removed by means of a squeegee, and in any case, neither a trough nor a mound shall be formed. Sufficient time shall be allowed for the sealant to harden in accordance with the manufactures instructions before allowing traffic access to the area.

<u>ITEM 15 – RESETTING OF FRAMES, GRATES AND COVERS</u>

SPECIFICATION 15.1

This pay item shall consist of the removal and resetting of all castings owned and maintained by the OWNER within the paved areas or areas of work. These castings include frames for catch basin grates, drainage and sewer manholes, water service shutoff valves, and water gate valve boxes. This Pay item assumes the removal and

resetting as one item regardless of how many times it is removed and reset. Resetting of castings will be paid for on a unit basis as agreed upon by the contract monitor/inspection ENGINEER. Payment will only occur after the application of the final pavement wearing surface. Adjusting grates or covers and frames will be measured by the number installed except when they are part of the structure measured under Item 21. A cover and frame are a unit, and a grate and frame will be a unit.

SPECIFICATION 15.3

Protect structures from debris during removal and construction of roadway, then, when appropriate reset frames, grates and covers as directed; man hole covers shall be flush with the finished pavement and catch basins are to be left 1" or 1.5" below finish or as directed. Clay brick shall conform to the requirements of AASHTO M 91, Grade MS. The use of concrete brick will not be permitted. Cement Mortar shall conform to NHDOT Specifications 707. Frames and covers shall be set in a concrete bed and shall conform to the requirements of NHDOT Specification 520; no final paving of wearing course over structures will be permitted

If for any reason a structure is in the final condition found to be buried, then the CONTRACTOR shall be responsible for the following; saw cut area around frame / structure to allow for a plate compactor to fit in its entirety around the perimeter, excavate, raise structure, replace material if necessary with appropriate gravel, place pavement in two lifts (wearing course type –E) then infrared the joint to blend existing pavement seamlessly.

Upon completion, each structure shall be cleaned of silt debris, or other matter of and kind and shall be kept free until the Acceptance of the Work.

SPECIFICATION 15.4

The City may elect to replace any number of covers and frames and grates as desired to meet city standards (regardless of size) and shall supply the replacement apertures to the CONTRACTOR. Any unused or replaced structures are the property of the City of Rochester and shall be returned to the DPW at 45 Old Dover Road.

ITEM 16 – CALCIUM CHLORIDE

SPECIFICATION 16.1

Calcium Chloride shall be at the price per gallon as agreed upon by the contract. OWNER will pay for the application of calcium chloride only after the OWNER has consented to its application on a street or in a neighborhood.

SPECIFICATION 16.2

Payment will be for the actual amount of calcium chloride applied. The material cost of calcium chloride will be paid for as item no. 16; however the labor and equipment necessary for material application will be subsidiary.

SPECIFICATION 16.3

For the full depth reclamation process, the bottom 4 to 9 inches of the cross section should be treated with approximately 1.3 #/yd 2 of calcium chloride. The rate that Calcium Chloride shall be applied may be increased due to the temperature, relative humidity. Rate, particle size distribution and environmental conditions that exist for the given roadway application. 75% of the predetermined amount shall be spread uniformly at this depth, when a calcium chloride solution is used uniform spraying of the liquid is adequate, however, in this case calcium chloride pellets can be used. Then distribute the remaining 25 % of the calcium chloride solution to the entire surface. A reapplication may be required at a rate of .20 to .25 gal/yd2 if prolonged period exists between fine grading and base pavement application.

ITEM 17 – EXCAVATION OF DITCH LINES

SPECIFICATION 17.1

This item shall include excavation, embankment-in-place, embankment-in-place surplus, stockpile surplus, and borrow, impervious material and rehandling surcharge material.

Temporary erosion control measures shall be put in place and consist of the use of hay bales, or silt control fencing, as an erosion and pollution control device at locations directed by the Contract Monitors.

Conform to all requirements of New Hampshire Department of Environmental Services permits.

Verify prior to start of work, areas and requirements of erosion control and discuss with Contract Monitors / OWNERs.

Reference Standards for erosion control shall be New Hampshire Stormwater Management Manual. Manual shall be the most recent edition.

Hay bales for shall consist of rectangular-shaped bales of hay or straw weighing at least 40 pounds per bale. They shall be free from primary noxious weed seeds and rough or woody materials.

SPECIFICATION 17.2

Embankments shall be graded to ensure run-off of water. No embankments shall be constructed on frozen earth materials. Sustained freezing temperatures shall result in

the suspension of all embankment work, unless directed otherwise by the ENGINEER fill materials shall be free of ice and frozen particles. If areas are saturated by water, it shall be corrected.

A roadside ditch shall be assumed to be six (6) foot wide. Remove and replace mailboxes as necessary. Roadside ditches shall be loamed and seeded if longitudinal slope is less than three percent (3%). Slopes greater than three percent (3%)but less than five percent (5%) shall have jute matting (Excelsior Single Net by Eco-systems, Inc. or similar) for erosion protection. Slopes greater than five percent (5%) shall have a suitable geotextile fabric and riprap consisting of erosion stone with a d50 diameter of six (6) inches, or as directed by the OWNER. Install 6 inch perforated corrugated plastic underdrain pipe in locations specified by the OWNER. Install two (2) foot wide gravel shoulders to pavement elevation for full length of street up to the pavement edge on those streets without curbing.

Direct run-off appropriately until vegetation or riprap is in-place at drainage swales.

SPECIFICATION 17.3

Matting for Erosion Control shall consist of one of the following:

- 1. Jute mat of open weave averaging 130 pounds per 14,400-yard spindle or 1.22 pounds per linear foot of weave 48 average inches wide.
- 2. Excelsior mat of wood excelsior, 35 inches minimum width, weighing 0.8 pounds per yard. Mat shall have netting attached to a single side to facilitate handling and to increase strength.
- 3. Staples used as matting anchors shall be No. 11 (or heavier) plain iron wire, made from lengths of 12 inches each.

SPECIFICATION 17.4

<u>Siltation fence</u>, when required, shall be MIRAFI Environfence or approved equal. On particularly steep slopes or areas where there is a likelihood that a significant quantity of water may pass behind the siltation fence, the OWNER may require the siltation fence be reinforced on the down gradient side with chicken wire or similar wire meshed fabric acceptable to the Owner's ENGINEER.

ITEM 18 - MAILBOX ASSEMBLY

SPECIFICATION 18.1

Payment will be a unit cost for the removal and resetting of each mailbox assembly including post(s) and associated mailbox(es). Any mailbox structure that has two or more physical mailboxes mounted to a single post structure will be counted as one mailbox assembly.

Contractor shall take care in the removal of the mailbox assembly, if destroyed than it shall be replaced in kind (with same) and paid for at the agreed upon unit price. Costs associated with a new replacement mailbox assembly are incidental.

Interim settings to facilitate the receipt of mail while operations are occurring are considered incidental.

ITEM 19 - LOAM AND SEED

SPECIFICATION19.1

Loam and seed will be measured by the square yard as determined by actual surface measurements of the lengths and widths of the loamed areas to the nearest square yard.

The accepted quantities of loam and seed of the depth specified will be paid for at the contract unit price per square yard complete in place with the seed germinating and growth established to the OWNERS satisfaction.

New topsoil shall be loose, friable material without refuse or chemicals toxic to growth. Loam shall be free of stones, lumps, stumps, roots or objects greater than two (2") inches in diameter.

Topsoil shall be obtained from approved local sources. Loam obtained from bogs or wet areas shall be unacceptable.

All grass seed shall be fresh, clean, new crop seed and shall meet the provisions of the New Hampshire Agricultural and Vegetable Seeds Law. Other seed mixtures and application rates may be utilized as recommended by USDA – Natural Resources Conservation Service, but only upon written approval from the Contract Monitors.

SPECIFICATION 19.2

Make every effort to seed during optimum growing periods and to conform to the requirements below;

1 Seed:

GRASS MATERIALS (NHDOT PARK SEED TYPE 15 MIX)

	LBS/ACRE
Creeping Red Fescue (38%)	30
Perennial Rye Grass (25%)	20
Red Top (6%)	5
Kentucky Bluegrass (31%)	25

80 lbs/acre

GRASS MATERIALS (NHDOT SLOPE SEED TYPE 44 MIX)

	LBS/ACRE	
Creeping Red Fescue (42%)	25	
Perennial Rye Grass (33%)	20	
Red Top (8%)	5	
Alsike Clover (8%)	5	
Birdfoot Trefoil (8%)	5	
Other (1%)	0	_
	60	lbs/acre

- 2 <u>Application Rate</u>: see above.
- Lime: Calcitic or dolomitic limestone applied at a rate of 2 tons per acre (100 pounds per 1,000 square feet), if deemed necessary by the ENGINEER. Sieve analysis shall show a minimum of 40 percent passing a No. 100 sieve; 95 percent passing a No. 8 sieve
- 4 <u>Fertilizer</u>: 10-20-20 applied at a rate of 300 pounds per acre (7 pounds per 1,000 square feet).

Seeding shall be applied by broadcast or hydro-seeding method.

- 1. Mulch all seeded areas within 48 hours of application. Hay properly fluffed may be applied at approximately, but not in excess of, 3 tons per acre.
- Mattings, when installed on slopes, shall be installed in accordance with Section 644.3 of New Hampshire Department of Transportation <u>Standard Specifications for Bridge and Highway</u> Construction.

Certification of seed and fertilizer manufacturer's guaranteed analysis of materials shall be submitted in advance of starting the Work of this section.

- 1. Seed analysis shall cite botanical and common names of each seed of the mixture required.
- 2. Samples of loam to be used from on-site stockpile shall be submitted.

Grass seed shall be delivered in original containers showing analysis, percentage of pure seed, year of production, net weight, germination rate and location of packaging.

All areas to be seeded shall be graded uniformly. Foreign matter, plants, roots, stones and debris shall be removed from sub grade.

Topsoil shall be applied to a minimum depth of 4". Lime and fertilizer shall be worked into the soil by raking, harrowing or dragging with a chain mat.

- 1. Lime shall be applied at a rate not to exceed 2 tons per acre, but generally at the direction of the Contract Monitors.
- 2. Fertilizer shall be applied at a minimum rate of 12 pounds per 1000 square feet.

Seed shall be applied at the recommended application rates shown.

Seed shall be applied only after 24 hours have elapsed from the time of lime application and worked into the top three (3") inches of topsoil.

Loamed areas shall be raked, rolled, and mulched as soon as possible.

Hydro-seeded areas shall be done in accordance with Section 644 of the New Hampshire Standard Specifications.

Seeding of areas shall be done between April 1 and June 1, and August 15 and October 21.

SPECIFICATION 19.3

Maintain and establish lawns by watering, fertilizing, weeding, replanting and other operations as necessary. Roll, regrade and replant bare or eroded areas and mulch to provide uniformly smooth lawn. Maintain temporary protection fences as necessary to establish lawns.

Watering: Water lawns as needed. The CONTRACTOR shall contact the OWNER to review water source(s) availability and coordinate access to those source(s).

The initial mowing and trimming shall be performed by the CONTRACTOR as soon as there is enough top growth to cut with a mower set a 3" high.

Post fertilizer: Apply fertilizer to lawn after first mowing and when grass is dry, as necessary.

SPECIFICATION 19.4

Remove temporary hay bale, silt fence and berms once permanent soil stabilization has taken place.

Remove unsuitable sediment and silt materials from the site and dispose of in a suitable manner.

Seeded areas shall be mulched with cured hay. When air-dried in the loose state, the contents of a representative bale shall lose not more than 15 percent of its resulting air-dry weight. It shall be free from weed seeds and foreign matter.

Restoration of growth may be accepted in parts agreeable to the Contract Monitors, provided the Work offered is complete, including maintenance. To be acceptable, a stand of grass shall show a reasonably thick, uniform stand free from sizeable areas of thin or bare spots.

The CONTRACTOR shall provide a one (1) year warranty for all restoration of growth after the date of Substantial Completion. The warranty shall provide a guarantee for the restoration area against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by the OWNER or abutting individual landowners, abnormal weather conditions unusual for warranty period, or incidents that are beyond the CONTRACTOR's control.

ITEM 20 – UNDERDRAIN

SPECIFICATION 20.1

The accepted quantities of underdrain will be that installed according to manufacturers specifications, wrapped in fabric filter sock or suitable geotextile, and backfilled to the satisfaction of the OWNER. It will be paid according to the linear foot complete in place to the satisfaction of the OWNER.

ITEM 21 - REBUILDING CONCRETE / BRICK STRUCTURES

SPECIFICATION 21.1

This work shall consist of constructing or reconstructing catch basins, drop inlets, and manholes as directed and shall be measured by the linear foot (LF), vertically to the nearest one (1) inch, between the top of the undisturbed portion of the existing structure to the bottom of the reset frame and grate. Item 15 Remove & Reset Castings shall not be paid when this work is ordered. At least six (6) inches of reconstructing will be allowed in all cases.

SPECIFICATION 21.2

Clay brick shall conform to the requirements AASHTO M 91, Grade MS. The use of concrete brick will not be permitted. Concrete Masonry Units shall conform to the requirements of ASTM C 139 and shall have a minimum compressive strength of 20 MPa (3000 psi) when tested by the method in AASHTO T 140. Cement mortar shall conform to NHDOT Specifications sec 707.

SPECIFICATION 21.3

No payment will be made for reconstructing portions of structures which are unnecessarily disturbed. Testing of sewer manholes required shall be subsidiary.

ITEM 22 - CURBS

SPECIFICATION 22.1

This work shall consist of resetting curbs as directed and shall be paid for on a linear foot (LF) basis.

SPECIFICATION 22.2

Curb shall be new granite, salvaged granite, or bituminous or as directed. Granite shall be hard, durable, reasonably uniform in appearance, and free from weak seams.

SPECIFICATION 22.3

Finishes and Tolerances shall conform to Section 609 in NHDOT Specifications, however, all granite put in place shall be backed with 3/8" concrete only. No payment shall be made for reconstructing curbing portions which are unnecessarily destroyed.