

CONTRACT DOCUMENTS AND SPECIFICATIONS

for

2018 Paving and Roadwork

Bid Proposal #54-18

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City of Portsmouth, New Hampshire

Prepared by:

City of Portsmouth
Engineering Division
Public Works Department

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City of Portsmouth
Portsmouth, New Hampshire
Department of Public Works

2018 Paving and Roadwork

INVITATION TO BID

Sealed bid proposals, **plainly marked, 2018 Paving and Roadwork Project**, Bid Proposal #54-18 **on the outside of the mailing envelope as well as the sealed bid envelope**, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, New Hampshire, 03801, will be accepted until **2:30 p.m. on Monday, March 12, 2018**; at which time all bids will be publicly opened and read aloud.

This project consists of the pavement repair and road reconstruction of several roads in Portsmouth, NH. Specifically, the work includes hot bituminous paving, cold planing, reclaiming, structure adjustment & replacement, fine grading, pavement striping and other ancillary tasks.

Specifications may be obtained from the City's web site: <http://www.cityofportsmouth.com/finance/purchasing.htm>, by contacting the Finance/Purchasing Department on the third floor at the above address, or by calling the Purchasing Coordinator at 603-610-7227. Addenda to this bid document, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will **NOT** be sent directly to vendors. Questions may be addressed to the Purchasing Coordinator.

Work may begin on or after May 1, 2018. Streets are to be completed within 28 days once work on them is begun. All sections of the work shall be completed by October 31, 2018. Liquidated damages shall be assessed at \$100.00 per day.

Bidders must determine the quantities of work required and the conditions under which the work will be performed.

The City reserves the right, after bid opening and prior to award of the contract, to modify the amount of the work in the event that bids exceed budgeted amounts. The City of Portsmouth further reserves the right to reject any or all bids, to waive technical or legal deficiencies, to re-bid, and to accept any bid that it may deem to be in the best interest of the City.

Each Bidder shall furnish a bid security in the amount of ten percent (10%) of the bid. The Bid Security may be in the form of a certified check drawn upon a bank within the State of New Hampshire or a bid bond executed by a surety company authorized to do business in the State of New Hampshire, made payable to the City of Portsmouth, N.H.

Bidders must be pre-qualified by the New Hampshire Department of Transportation for paving work. Any Bid submitted by a Bidder not pre-qualified will be rejected as non-conforming. Any subcontractor working on the project will be pre-approved by the City prior to the start of construction.

The General Contractor will be permitted to subcontract portions of the work not to exceed an aggregate dollar value of 50% of the total contract bid amount in complete accordance with Section 108 of the State of New Hampshire Standard Specifications for Road and Bridge Construction.

INSTRUCTIONS TO BIDDERS

BIDDING REQUIREMENTS AND CONDITIONS

1. Special Notice to Bidders

Appended to these instructions is a complete set of bidding and general contract forms. These forms may be detached and executed for the submittal of bids. The plans, specifications, and other documents designated in the proposal form will be considered as part of the proposal, whether attached or not.

The bidders must submit a statement of bidder's qualifications, if requested, subsequent to bid opening but prior to award.

Addenda to this proposal, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to firms. Contractors submitting a proposal should check the web site daily for addenda and updates after the release date. Firms should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification

2. Interpretation of Quantities in Bid Schedules

The quantities appearing in the bid schedule are approximate only and are prepared for the comparison of bids. Payment to the contractor will be made only for actual work performed and accepted in accordance with the contract. Any scheduled item of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided, and no claim for loss, anticipated profits or costs incurred in anticipation of work not ultimately performed will be allowed due to such increase or decrease.

3. Examination of Plans, Specifications and Site Work

The bidder is expected to examine carefully the site of the proposed work, the plans, standard specifications, supplemental specifications, special provisions and contract forms before submitting a proposal. The submission of a bid shall be considered conclusive evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the contract. It will be conclusive evidence that the bidder has also investigated and is satisfied with the sources of supply for all materials.

Plans, surveys, measurements, dimensions, calculations, estimates and statements as to the condition under which the work is to be performed are believed to be correct, but the contractors must examine for themselves, as no allowance will be made for any errors or inaccuracies that maybe found therein.

4. Familiarity with Laws

The bidder is assumed to have made himself or herself familiar with all federal and state laws and all local by-laws, ordinances and regulations which in any manner affect those engaged or employed on the work or affect the materials or equipment used in the work or affect the conduct of the work, and the bidder, if awarded the contract, shall be obligated to perform the work in conformity with said laws, by-laws, ordinances and regulations notwithstanding its ignorance thereof. If the bidder shall discover any provision in the plans or specifications which is in conflict with any such law, by-law, ordinance or regulation the bidder shall forthwith report it to the engineer in writing.

5. Preparation of Proposal

a) The bidder shall submit its proposal upon the forms furnished by the Owner. The bidder shall specify a lump sum price in figures, for each pay item for which a quantity is given and shall also show the products of the respective prices and quantities written in figures in the column provided for that purpose and the total amount of the proposal obtained by adding the amount of the several items. All words and figures shall be in ink or typed. If a unit price or a 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.

b) The bidder's proposal must be signed with ink by the individual, by one or more general partners of a partnership, by one or more members or officers of each firm representing a joint venture; by one or more officers of a corporation, by one or more members (if member-managed) or managers (if manager-managed) of a limited liability company, or by an agent of the contractor legally qualified and acceptable to the owner. If the proposal is made by an individual, his or her name and post office address must be shown, by a partnership the name and post office address of each general and limited partner must be shown; as a joint venture, the name and post office address of each venturer 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.

6. Nonconforming Proposals

Proposals will be considered nonconforming and may be rejected in the Owner's sole discretion for any of the following reasons:

- If the proposal is on a form other than that furnished by the Owner, or if the form is altered or any portion thereof is detached;
- If there are unauthorized additions, conditional or altered bids, or irregularities of any kind which may tend to make the proposal or any portion thereof incomplete, indefinite or ambiguous as to its meaning;
- If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award; or
- If the proposal does not contain a unit price for each pay item listed except in the case of authorized alter pay items.

7. Proposal Guaranty

No proposal will be considered unless accompanied by a bid bond, surety, or similar guaranty of the types and in an amount not less than the amount indicated in the Invitation to Bid. All sureties shall be made payable to the "City of Portsmouth". If a bid bond is used by the bidder it shall be:

- In a form satisfactory to the Owner;
- With a surety company licensed, authorized to do business in, and subject to the jurisdiction of the courts of the State of New Hampshire; and
- Conditioned upon the faithful performance by the principal of the agreements contained in the sub-bid or the general bid.

In the event any irregularities are contained in the proposal guaranty, the bidder will have four business days (not counting the day of opening) to correct any irregularities. The corrected guaranty must be received by 4:00 p.m. If irregularities are not corrected to the satisfaction of the Owner, the Owner, in its sole discretion, may rejected the bid.

8. Delivery of Proposals

When sent by mail, the sealed proposal shall be addressed to the Owner at the address and in the care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the invitation for bids. Proposals received after the time for opening of the bids will be returned to the bidder, unopened.

9. Withdrawal of Proposals

A bidder will be permitted to withdraw his or her proposal unopened after it has been submitted if the Owner receives a request for withdrawal in writing prior to the time specified for opening the proposals.

10. Public Opening of Proposals

Proposals will be opened and read publicly at the time and place indicated in the invitation for bids. Bidders, their authorized agents, and other interested parties are invited to be present.

11. Disqualification of Bidders

Any or all of the following reasons may be deemed by Owner in its sole discretion as being sufficient for the disqualification of a bidder and the rejection of his proposal:

- More than one proposal for the same work from an individual, firm, or corporation under the same or different name;
- Evidence of collusion among bidders;
- Failure to submit all required information requested in the bid specifications;
- If the Contractor is not listed with the New Hampshire Department of Transportation as a pre-qualified contractor under the classification of Paving;
- Lack of competency or of adequate machinery, plant or other equipment, as revealed by the statement of bidders qualification or otherwise;
- Uncompleted work which, in the judgment of the owner, might hinder or prevent the prompt completion of additional work if awarded;
- Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts;
- Default or unsatisfactory performance on previous contracts; or
- Such disqualification would be in the best interests of the Owner.

12. Material Guaranty and Samples

Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition and manufacture of any or all materials to be used in the construction of the work, and the Owner may, in its sole discretion, reject the bid based on the contents of the statement or as a result of the failure of the bidder to submit the statement.

AWARD AND EXECUTION OF CONTRACT

1. Consideration of Proposals

a) After the proposals are opened and read, they will be compared on the basis of the total price for all sections of work to be charged to perform the work and any such additional considerations as may be identified in the bid documents. The results of such comparisons will be immediately available to the public. In case of a discrepancy between the prices written in words and those written figures, the prices written in words shall govern. In case of a discrepancy between the total shown in the proposal and that obtained by adding the products of the quantities of items and unit bid prices, the latter shall govern.

b) The Owner reserves the right to reject any or all proposals, to waive technicalities or to advertise for new proposals, if, in the sole discretion of the Owner, the best interest of the City of Portsmouth will be promoted thereby.

2. Award of Contract

Within 30 calendar days after the opening of proposals, if a contract is to be awarded, the award will be made to the lowest responsible and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified, in writing, mailed to the address on his or her proposal, that his or her bid has been accepted and that the bidder has been awarded the contract.

The award shall not be considered official until such time that a Purchase Order, fully executed contract or an award letter has been issued by the Finance Director. No presumption of award shall be made by the bidder until such documents are in hand. Verbal notification of award is not considered official. Any action by the bidder to assume otherwise is done so at his/her own risk and the City will not be held liable for any expense incurred by a bidder that has not received an official award.

Determination of the lowest bidder will be based on the total price for the work described on the bid proposal form. Due to fluctuating prices and possible budget limitations, the City reserves the right to delete portions of the work prior to contract execution.

3. Cancellation of Award

The Owner reserves the right to cancel the award of any contract at any time before the execution of such contract by all parties without any liability of the Owner.

4. Return of Proposal Guaranty

All proposal guaranties, except those of the three lowest bidders, will be returned upon request following the opening and checking of the proposals. The proposal guaranties of the three lowest bidders will be returned within ten days following the award of the contract if requested.

5. Contract Bond

At the time of the execution of the contract, the successful bidder shall furnish:

- A performance bond in the amount of 100 percent of the contract amount.
- Labor and materials payment bond in the amount of 100 percent of the contract amount.

Each bond shall be: (1) in a form satisfactory to the Owner; (2) with a surety company licensed and authorized to do business and with a resident agent designated for services of process in the State of New Hampshire; and (3)

conditioned upon the faithful performance by the principal of the agreements contained in the original bid. All premiums for the contract bonds are to be paid by the contractor.

6. Execution and Approval of Contract

The successful bidder is required to present all contract bonds, to provide proof of insurance, and to execute the contract within 10 days following receipt of the City's notification of acceptance of the bid. No contract shall be considered as in effect until it has been fully executed by all parties.

7. Failure to Execute Contract

Failure to execute the contract and file an acceptable bond within 10 days after notification of acceptance of bid shall be just cause for the cancellation of the award and the forfeiture of the proposal guarantee which shall become the property of the Owner, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised as the Owner may determine in its sole discretion.

PROPOSAL FORM

2018 Paving and Roadwork

CITY OF PORTSMOUTH, N.H.

To the City of Portsmouth, New Hampshire, herein called the Owner.

The undersigned, as Bidder, herein referred to as singular and masculine declares as follows:

1. All interested in the Bid as Principals are named herein;
2. This bid is not made jointly, or in conjunction, cooperation or collusion with any other person, firm, corporation, or other legal entity;
3. No officer, agent or employee of the Owner is directly or indirectly interested in this Bid;
4. The bidder has carefully examined the sites of the proposed work and fully informed and satisfied himself as to the conditions there existing, the character and requirements of the proposed work, the difficulties attendant upon its execution and the accuracy of all estimated quantities stated in this Bid, and the bidder has carefully read and examined the Drawings, Agreement, Specifications and other Contract Documents therein referred to and knows and understands the terms and provisions thereof;
5. The bidder understands that the quantities of work calculated in the Bid or indicated on the Drawings or in the Specifications or other Contract Documents are approximate and are subject to increase or decrease or deletion as deemed necessary by the Portsmouth City Engineer. Any such changes will not result in or be justification for any penalty or increase in contract prices; and agrees that, if the Bid is accepted the bidder will contract with the Owner, as provided in the Contract Documents, this Bid Form being part of said Contract Documents, and that the bidder will supply or perform all labor, services, plant, machinery, apparatus, appliances, tools, supplies and all other activities required by the Contract Documents in the manner and within the time therein set forth, and that the bidder will take in full payment therefor the following item prices; and
6. It is the intention of this contract that the items listed above describe completely and thoroughly the entirety of the work as shown on the plans and as described in the specifications. All other items required to accomplish the above items are considered to be subsidiary work, unless shown as a pay item.

SEE SPREADSHEET IN BACK OF DOCUMENT FOR SPECIFIC LOCATION OF ITEMS

ITEM #	EST. QTY.	UNITS	ITEM DESCRIPTION	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
202.5	1	Ea	Removal of old Catch Basin or Manhole	_____	_____
203.1	1500	CY	Excavation of Excess Reclaim	_____	_____
203.1S	50	CY	Excavation of Bituminous Sidewalks	_____	_____
214	14000	SY	Fine Grading	_____	_____
304.3	100	CY	Crushed Gravel for Sidewalk/Patches	_____	_____
304.32	100	CY	Shoulder Gravel	_____	_____
306.208	14000	SY	8" Reclaim Stab. Base	_____	_____
306.36	800*	Tons	1 1/2" - 2" Stone for Reclaim Stab. Base Blended in via reclaimer	_____	_____
403.11 B	1700	Ton	Machine Pave (50GYR) 3/4" Fine Binder (aka Winter Binder)	_____	_____
403.11H	850	Ton	Machine Pave 3/8" Wearing High Strength Mix if ordered (Item is price differential per ton from normal wearing course mix (403.11W)	_____	_____
403.11W	9900	Ton	Machine Pave 3/8"(75gyr) or 1/2"(50gyr) Wearing	_____	_____
403.12	700	Ton	Hand Method Paving	_____	_____
403.13L	280	Sy	Pavement Patching ≥30 square yards	_____	_____
403.13S	250	Sy	Pavement Patching <30 square yards	_____	_____
403.6	33000	LF	Pavement Joint Adhesive on various sites	_____	_____
413.6	19000	Lbs	Crack Sealing for thin overlays	_____	_____
417	13000	SY	Cold Planing with large machine	_____	_____
417A	1	Day	Large Cold Planer with crew and trucking	_____	_____
417B	3000	SY	Cold Plane (Butt Joints with Bobcat or similar)	_____	_____
520	70	CY	Class A Concrete Backfill for Curb	_____	_____
520.421	80	CY	Excavatable Flowable fill for structures	_____	_____

PROPOSAL FORM (continued)

604.0007	50*	Ea.	CB Polyethylene liners	_____	_____
604.12	1*	Ea	New Type B Catch Basin (W/ Frame & Grate)	_____	_____
604.12A	10*	Ea	Replace Top structure of Catch Basin (W/ F&G) With Precast Top	_____	_____
604.22	1*	EA	New Drop Inlet Catch Basin (W/ F&G)	_____	_____
604.324	1*	VF	Install New Drain Manhole	_____	_____
604.4	240*	VF	Adjust CB F & G using brick and mortar	_____	_____
604.51	80*	VF	Adjust SMH Cover using brick and mortar	_____	_____
604.52	20*	VF	Adjust DMH Cover using brick and mortar	_____	_____
604.61	17*	EA	Install 32" SMH F & C <u>Provided by City</u>	_____	_____
604.611	9*	EA	Purchase and Install 24" SMH F & C (USA Made)	_____	_____
604.62	5*	EA	Purchase and Install 32" DMH F & C (USA Made)	_____	_____
604.62	9*	EA	Purchase and Install 24" DMH F & C (USA Made)	_____	_____
604.72	50*	EA	Purchase and Install CB F & G (USA Made)	_____	_____
608.12	50*	SY	Patching/Paving Asphalt Sidewalks 2 1/2"	_____	_____
609.01	20*	LF	Vertical Granite Curbing	_____	_____
609.02	20*	LF	Curved Granite Curbing	_____	_____
609.21	100*	LF	Sloped Granite Curbing	_____	_____
609.5	3300*	LF	Reset curbing	_____	_____
611.90001	10*	EA	Adjust Existing Gate Valve Sleeves	_____	_____
611.90001A	5*	EA	Replace Gate Valve Sleeves	_____	_____
611.90001B	60*	EA	Adjust Gate Valve Sleeve with riser rings	_____	_____
616.650	3	EA	6' x 50' Traffic Signal Loop	_____	_____
618.6	1	Allowance	Portsmouth Police (Traffic Control)	<u>\$2,000.00</u>	<u>\$2,000.00</u>
618.7	1	Allowance	Flaggers	<u>25,000.00</u>	<u>\$25,000.00</u>
619	1	U	Maintenance of Traffic	_____	_____
628.2	1600	LF	Saw Bituminous Pavement where directed	_____	_____

PROPOSAL FORM (continued)

632.0104	17500	LF	4" Painted Lane Striping with layout	_____	_____
632.3112	2200	LF	12" Thermoplastic Striping (Stop Bars, x-walks)	_____	_____
632.3118	60	LF	18" Thermoplastic Striping (Stop Bars, x-walks)	_____	_____
632.32	240	SF	Thermoplastic Words & Symbols	_____	_____
641	250	CY	Loam and Seed	_____	_____
692	1	U	Mobilization	_____	_____
1010.2	1	\$	Asphalt Cement Adjustment	<u>\$10,000.00</u>	<u>\$10,000.00</u>

*Estimated Quantity item, quantity unknown and to be verified prior to purchase of material.

TOTAL FOR PROJECT AND BASIS OF AWARD

Total in Figures \$ _____.

In Words \$ _____

The City reserves the right to delete any portion of the work/reduce the quantities of work represented in this bid proposal form.

The undersigned agrees that for extra work, if any, performed in accordance with the terms and provisions of the Contract Documents, the bidder will accept compensation as stipulated therein.

Date

Company

By: _____
Signature

Business Address

Title: _____

City, State, Zip Code

Telephone: _____

The Bidder has received and acknowledged Addenda No. _____ through _____.

All Bids are to be submitted on this form and in a sealed envelope, plainly marked on the outside with the Bidder's name and address and the Project name as it appears at the top of the Proposal Form.

We certify that the Company is currently pre-qualified with the State of New Hampshire for Paving Work.

By: _____
Signature

In order to follow the City's sustainability practices, future bid invitations/specifications may be sent electronically. Please provide an email address as to where I could email future bid invitations/specifications of this type. Thank you in advance for your cooperation.

Email

Address: _____

BID SECURITY BOND

(This format provided for convenience, actual Bid Bond is acceptable in lieu of, if compatible.)

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned

_____, as Principal, and

_____, as Surety, are hereby

held and firmly bound unto _____

IN THE SUM OF _____

as liquidated damages for payment of which, well and truly to be made we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of this obligation is such that whereas the Principal has submitted to the

_____ A CERTAIN Bid attached hereto and hereby made a part hereof to enter into a contract in writing, hereinafter referred to as the "AGREEMENT" and or "CONTRACT", for

NOW THEREFORE,

- (a) If said Bid shall be rejected or withdrawn as provided in the INFORMATION FOR BIDDERS attached hereto or, in the alternative,
- (b) If said Bid shall be accepted and the Principal shall duly execute and deliver the form of AGREEMENT attached hereto and shall furnish the specified bonds for the faithful performance of the AGREEMENT and/or CONTRACT and for the payment for labor and materials furnished for the performance of the AGREEMENT and or CONTRACT,

then this obligation shall be void , otherwise it shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder in no event shall exceed the amount of this obligation.

BID SECURITY BOND (continued)

The Surety, for value received, hereby agrees that the obligation of said surety and its bond shall be in no way impaired or affected by any extensions of the time within such BID may be accepted, and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the parties hereto have duly executed

this bond on the _____ day of _____, 20__.

L.S.
(Name of Principal)

(SEAL)

BY _____

(Name of Surety)

BY _____

STATEMENT OF BIDDER'S QUALIFICATIONS

Note: This is a required submittal, fill out completely.

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Add separate sheets if necessary

1. Name of Bidder
2. Permanent Main Office Address
3. Form of Entity
4. When Organized
5. Where Organized
6. How many years have you been engaged in the contracting business under your present name; also state names and dates of previous firm names, if any.
7. Contracts on hand; (schedule these, showing gross amount of each contract and the approximate anticipated dates of completion).
8. General character of work performed by your company.
9. Have you ever failed to complete any work awarded to you? ____ (no) ____ (yes). If so, where and why?
10. Have you ever defaulted on a contract?
____ (no) ____ (yes). If so, where and why?
11. Have you ever failed to complete a project in the time allotment according to the _____ Contract Documents?
____ (no) ____ (yes). If so, where and why?
12. List the most important contracts recently executed by your company, stating approximate cost for each, and the month and year completed.
13. List your major equipment available for this contract.
14. List your key personnel such as project superintendent and foremen available for this contract.
15. List any subcontractors whom you will use for the following (unless this work is to be done by your own organization, if so please state).
 - a. Crack sealing and Joint adhesive _____
 - b. Adjusting Structures _____
 - c. Pavement Markings _____
 - d. Curbing _____
 - e. Traffic Signals _____
 - f. Drainage Structures _____

(The City reserves the right to approve subcontractors for this project)

STATEMENT OF BIDDERS QUALIFICATIONS (continued)

16. With what banks do you do business?

a. Do you grant the Owner permission to contact this/these institutions?

____(yes) ____ (no).

b. Latest Financial Statements, certified audited if available, prepared by an independent certified public accountant, may be requested by Owner. If requested, such statements must be provided within five (5) business days or the bid proposal will be rejected. Certified Audited Statement are preferred. Internal statements may be attached only if independent statements were not prepared.

Dated at _____ this _____ day of _____, 20__.

Name of Bidder

BY _____

TITLE _____

State of _____

County of _____

_____ being duly sworn, deposes and

says that the bidder is _____ of _____
(Name of Organization)

and answers to the foregoing questions and all statements contained therein are true and correct.

Sworn to before me this _____ day of _____, 20__.

Notary of Public

My Commission expires _____

CONTRACT AGREEMENT**2018 Paving and Roadwork**

THIS AGREEMENT made as of the _____ in the year **2018**, by and between the City of Portsmouth, New Hampshire (hereinafter call the Owner) and _____. (hereinafter called the Contractor),

WITNESSETH; that the Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

ARTICLE I - Work - The Contractor shall perform all work as specified or indicated in the Contract Documents for the pavement repair of several roads in Portsmouth (roads to be designated by owner). The Contractor shall provide, at his expense, all labor, materials, equipment and incidentals as may be necessary for the expeditious and proper execution of the Project.

ARTICLE II - ENGINEER - The Director of Public Works or his authorized representative will act as City Engineer in connection with completion of the Project in accordance with the Contract Documents.

ARTICLE III - CONTRACT TIME - The work shall commence in accordance with the Notice to Proceed. Work on streets shall be completed on that single street within 28 days of commencing work on that street.

All Work shall be completed prior to October 31, 2018.

ARTICLE IV - CONTRACT PRICE - Owner shall pay Contractor for pavement repair for only those roads designated for repair by Owner as shown in the Preliminary List of Projects sheets attached or as set forth in the notice of intent to award if the bid amount exceeds budgeted amounts. Owner makes no representation that it will undertake all the pavement repairs estimated in the bid proposal form. Contractor will be paid only for work performed in accordance with the Contract Documents as shown under item prices in the Bid Proposal.

ARTICLE V - PAYMENT - Partial payments will be made in accordance with the Contract Documents. Upon final acceptance of the work and settlement of all claims, Owner shall pay the Contractor the unpaid balance of the Contract Price, subject to additions and deductions provided for in the Contract Documents.

ARTICLE VI - RETAINAGE - To insure the proper performance of this Contract, the Owner shall retain **ten percent** of the monthly payments claimed by the Contractor until 50% of the original contract work is invoiced and approved by the City. Once the Contractor has invoiced more than 50% of the contract value, provided that the Contractor has satisfied the City regarding the quality and timeliness of the work and provided further that there is no specific cause for withholding additional retainage, no further amount will be withheld. Upon substantial completion of the work the amount of retainage shall be reduced to 2% of the total contract value plus any additional retainage amounts required by the City based on the City's estimate of the fair value of any remaining punch list items. Any additional retainage held for punch list items shall be held until such time as all items on the punch list are repaired or completed to the City's acceptance. The final 2% of retainage shall be held until the warranty period has expired.

CONTRACT AGREEMENT (continued)

ARTICLE VII - LIQUIDATED DAMAGES - In event the Contractor fails to successfully execute the work within the specified contract time the Owner shall assess the Contractor liquidated damages in the amount of **one hundred dollars (\$100)** for each calendar day beyond the specified completion date for each section of work. Liquidated damages shall be deducted from the Contract Price prior to final payment of the Contractor.

ARTICLE VIII – CONTRACT DOCUMENTS – The Contract Documents which comprise the contract between Owner and Contractor are attached hereto and made a part hereof and consist of the following:

- 8.1 This Agreement
- 8.2 Contractor's Bid and Bonds
- 8.3 Notice of Award, Notice to Proceed
- 8.4 Instruction to Bidders
- 8.5 General Requirements, Control of Work, Temporary Facilities, Measurement and Payment, Standard Specifications
- 8.6 Insurance Requirements
- 8.7 Standard and Technical Specifications
- 8.8 Drawings
- 8.9 Special Provisions
- 8.10 Any modifications, including change orders, duly delivered after execution of this Agreement.

ARTICLE IX – TERMINATION FOR DEFAULT – Should contractor at any time refuse, neglect, or otherwise fail to supply a sufficient number or amount of properly skilled workers, materials, or equipment, or fail in any respect to prosecute the work with promptness and diligence, or fail to perform any of its obligations set forth in the Contract, Owner may, at its election, terminate the employment of Contractor, giving notice to Contractor in writing of such election, and enter on the premises and take possession, for the purpose of completing the work included under this Agreement, of all the materials, tools and appliances belonging to Contractor, and to employ any other persons to finish the work and to provide the materials therefore at the expense of the Contractor.

ARTICLE X – INDEMNIFICATION OF OWNER – Contractor shall defend, indemnify and hold harmless Owner and its officials and employees from and against all suits, claims, judgments, awards, losses, costs or expenses (including without limitation attorneys' fees) to the extent arising out of or relating to Contractor's alleged negligence or breach of its obligations or warranties under this Contract. Contractor shall defend all such actions with counsel satisfactory to Owner at its own expense, including attorney's fees, and will satisfy any judgment rendered against Owner in such action.

ARTICLE XI – PERMITS – The Contractor shall secure at its own expense, all permits and consents required by law as necessary to perform the work and shall give all notices and pay all fees and otherwise comply with all applicable City, State, and Federal laws, ordinances, rules and regulations.

ARTICLE XII – INSURANCE – The Contractor shall secure and maintain, until acceptance of the work, insurance with limits not less than those specified in the Contract.

ARTICLE XIII – MISCELLANEOUS –

- A. Neither Owner nor Contractor shall, without the prior written consent of the other, assign, sublet or delegate, in whole or in part, any of its rights or obligations under any of the Contract Documents; and, specifically not assign any monies due, or to become due, without the prior written consent of Owner.
- B. Owner and Contractor each binds himself, his partners, successors, assigns and legal representatives, to the other party hereto in respect to all covenants, agreements and obligations contained in the Contract Documents.
- C. The Contract Documents constitute the entire Agreement between Owner and Contractor and may only be altered amended or repealed by a duly executed written instrument.
- D. The laws of the State of New Hampshire shall govern this Contract without reference to the conflict of law principles thereof.
- E. Venue for any dispute shall be the Rockingham County Superior Court unless the parties otherwise agree.

IN WITNESS WHEREOF, the parties hereunto executed this
 AGREEMENT the day and year first above written.

BIDDER:

BY: _____

TITLE: _____

CITY OF PORTSMOUTH, N.H.

BY: _____

John P. Bohenko

TITLE: City Manager

NOTICE OF INTENT TO AWARD

Date:

TO:

IN AS MUCH as you were the low responsible bidder for work entitled:

2018 Paving and Roadwork

You are hereby notified that the City intends to award the aforesaid project to you.

Immediately take the necessary steps to execute the Contract and to provide required bonds and proof of insurance within fifteen (15) calendar days from the date of this Notice.

The City reserves the right to revoke this Notice if you fail to take the necessary steps to execute this Contract.

City of Portsmouth
Portsmouth, New Hampshire

Judie Belanger,
Finance Director

NOTICE TO PROCEED

DATE:

PROJECT: 2018 Paving and Roadwork

TO:

YOU ARE HEREBY NOTIFIED TO COMMENCE WORK IN ACCORDANCE

WITH THE AGREEMENT DATED, _____ ALL WORK SHALL BE COMPLETED PRIOR TO
OCTOBER 31, 2018.

THE FOLLOWING STREETS ARE HEREBY AUTHORIZED:

CITY OF PORTSMOUTH, N.H.

BY: Peter H. Rice

TITLE: Public Works Director

ACCEPTANCE OF NOTICE

RECEIPT OF THE ABOVE NOTICE TO
PROCEED IS HEREBY ACKNOWLEDGED BY

This the _____ day of _____ 20__

By: _____

Title: _____

CHANGE ORDER

Change Order # _____

Date of Issuance: _____

Owner: CITY OF PORTSMOUTH, N.H

Contractor: _____

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

Description:

Purpose of Change Order:

Attachments: _____

CHANGE IN CONTRACT PRICE

CHANGE IN CONTRACT TIME

Original Contract Price:
\$ _____

Original Completion Date: _____

Contract Price prior to this
Change Order:
\$ _____

Contract Time prior to this
Change Order: _____

Net Increase of
this Change Order:
\$ _____

Net Increase or Decrease of
this Change Order: _____

Contract Price with all
approved Change Orders:
\$ _____

Contract Time with all
approved Change Orders: _____

RECOMMENDED:

by _____

by _____

by _____

PW Director

Deputy Finance Director

Finance Director

APPROVED:

APPROVED:

by _____
City Manager

by _____
Contractor

PERFORMANCE BOND

(This format provided for convenience, actual Performance Bond is acceptable in lieu, if compatible)

Bond Number _____

KNOW ALL MEN BY THESE PRESENTS:

that _____ as Principal, hereinafter called Contractor, and _____ (Surety Company) a corporation organized and existing under the laws of the State of _____ and authorized to do business in the State of New Hampshire as surety, hereinafter called Surety, are held and firmly bound unto the City of Portsmouth, N.H. Obligee, hereinafter called Owner, in the amount of _____ Dollars (\$ _____), for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. WHEREAS, Contractor has by written agreement dated _____ entered into a contract with Owner for _____ in accordance with drawings and specifications prepared by the Public Works Department, 680 Peeverly Hill Road, Portsmouth, N.H. 03801, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Contractor shall well and faithfully do and perform the things agreed by him to be done and performed, according to the terms of said Contract and such alterations as may be made in said Contract during progress work, and shall further indemnify and save harmless the said Owner in accordance with the Contract and shall remedy without cost to the Owner any defect which may develop within one year from the time of completion and acceptance of the work.

The Surety hereby waives notice of any alteration in work or extension of time made by the Owner or any of its agents or representatives.

Whenever Contractor shall be, and declared by Owner to be, in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

- (1) Complete the Contract in accordance with its terms and conditions, or
- (2) Obtain a bid or bids for submission to the Owner for completing the Contract in accordance with its terms and conditions, and upon determination by Owner and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Owner and make available as work progresses (even though there should be a default or a succession of defaults under the contract of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price", as used in this paragraph, shall mean the total amount payable by the Owner to Contractor under the Contract and any amendments thereto, less the amount paid by Owner to Contractor.

PERFORMANCE BOND (continued)

Any suit under this bond must be instituted before the expiration of (2) years from the date on which final payment under the contract falls due.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of Owner.

Signed and sealed this _____ day of _____ A.D., 20__ .

In the presence of:

_____ BY: _____
(Witness) (Principal) (Seal)

(Surety Company)

_____ BY: _____
(Witness) (Title) (Seal)

Note:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized Officer or Officers.

If this bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his Power of Attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Agreement.

LABOR AND MATERIAL PAYMENT BOND

(This format provided for convenience, actual Labor and Material Bond is acceptable in lieu, if compatible)

Bond Number _____

KNOW ALL MEN BY THESE PRESENTS:

that _____

as Principal, hereinafter called Contractor, and _____ (Surety Company) a corporation organized and existing under the laws of the State of

_____ and authorized to do business in the State of New Hampshire hereinafter called Surety, are held and firmly bound unto the City of Portsmouth, N.H. Obligee, hereinafter called Owner, for the use and benefit of claimants as herein below defined, in the

amount of _____ Dollars (\$ _____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____ entered into a

contract with Owner for _____ in accordance with drawings and specifications prepared by the Public Works Department, 680 Peverly Hill Road, Portsmouth, N.H. 03801, which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that the Principal shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract and for the hire of all equipment, tools, and all other things contracted for or used in connection therewith, then this obligation shall be void, otherwise it shall remain in full force and effect, subject however, to the following conditions:

(1) A claimant is defined as one having a direct contract with the Principal or, with a subcontractor of the Principal for labor, material, equipment, or other things used or reasonably required for use in the performance of the Contract. "Labor and material" shall include but not be limited to that part of water, gas, power, light, heat, oil and gasoline, telephone service or rental of equipment applicable to the Contract.

(2) The above named Principal and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such a claimant, may sue on this bond for the use of such claimant, prosecute the suit by final judgment for such sum or sums as may be

LABOR AND MATERIAL PAYMENT BOND (continued)

justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any such suit or any costs or expenses of any such suit, and principal and surety shall jointly and severally indemnify, defend and hold the Owner harmless for any such suit, costs or expenses.

(3) No suit or action shall be commenced hereunder by any claimant:

(a) Unless Claimant, other than one having a direct contract with the Principal, shall have given notice to all the following:

The Principal, the Owner and the Surety above named, within six (6) calendar months after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Principal, Owner, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the State of New Hampshire save that such service need not be made by a public officer.

(b) After the expiration of one (1) year following the date on which Principal ceased all work on said contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.

(c) Other than in a State court of competent jurisdiction in and for the county or other political subdivision of the State in which the project, or any part thereof, is situated, or in the United States District Court for the district in which the project, or any part thereof, is situated, and not elsewhere. (4) The amount of this bond may be reduced by and to the extent of any payment of payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed on record against said improvement, whether or not claim for the amount of such lien by presented under and against this bond.

Signed and sealed this _____ day of _____, 20____. In the presence of:

(Witness) BY: _____
(Principal) (Seal)

(Surety Company)

(Witness) BY: _____
(Title) (Seal)

LABOR AND MATERIAL PAYMENT BOND (continued)

Note:

If the Principal (Contractor) is a partnership, the Bond should be signed by each of the partners.

If the Principal (Contractor) is a corporation, the Bond should be signed in its correct corporate name by its duly authorized Officer or Officers.

If this bond is signed on behalf of the Surety by an attorney-in-fact, there should be attached to it a duly certified copy of his Power of Attorney showing his authority to sign such Bonds.

There should be executed an appropriate number of counterparts of the bond corresponding to the number of counterparts of the Agreement.

CONTRACTOR'S AFFIDAVIT

STATE OF _____:

COUNTY OF _____:

Before me, the undersigned, a _____
(Notary Public, Justice of the Peace)

in and for said County and State personally appeared, _____
(Individual, Partner, or duly authorized representative of Corporate)

who, being duly sworn, according to law deposes and says that the cost of labor, material, and equipment and outstanding claims and indebtedness of whatever nature arising out of the performance of the Contract between

CITY OF PORTSMOUTH, NEW HAMPSHIRE

and _____
(Contractor)

of _____

Dated: _____

has been paid in full for Construction of: **2018 Paving and Roadwork**

(Individual, Partner, or
duly authorized
representative of
Corporate Contractor)

Sworn to and subscribed
before me this _____ day
of _____ 20____

CONTRACTOR'S RELEASE

KNOW ALL MEN BY THESE PRESENTS that _____

(Contractor) of _____, County of _____ and State of

_____ does hereby acknowledge

that _____ (Contractor)

has on this day had, and received from the CITY OF PORTSMOUTH NEW HAMPSHIRE, final and completed payment for the Construction of:

2018 Paving and Roadwork

NOW THEREFORE, the said _____

(Contractor)

for myself, my heirs, executors, and administrators) (for itself, its successors and assigns) do/does by these presents remise, release, quit-claim and forever discharge the City of Portsmouth, New Hampshire, its successors and assigns, of and from all claims and demands arising from or in connection with the said Contract dated _____, and of and from all, and all manners of action and actions, cause and causes of action and actions, suits, debts, dues, duties, sum and sums of money, accounts, reckonings, bonds, bills, specifications, covenants, contracts, agreements, promises, variances, damages, judgments, extents, executions, claims and demand, whatsoever in law of equity, or otherwise, against the City of Portsmouth, New Hampshire, its successors and assigns, which (I, my heirs, executors, or administrators) (it, its successors and assigns) ever had, now have or which (I, my heirs, executors, or administrators) (it, its successors and assigns) hereafter can shall or may have, for, upon or by reason of any matter, cause, or thing whatsoever; from the beginning of record time to the date of these presents.

IN WITNESS WHEREOF,

Contractor:

By: _____

print name of witness: _____

Its Duly Authorized _____

Dated: _____

GENERAL REQUIREMENTS

SCOPE OF WORK

1. INTENT OF CONTRACT

The intent of the Contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation and supplies required to complete the work in accordance with the terms of the Contract. The Contractor shall be required to conform to the intent of the plans and specifications. No extra claims shall be allowed for portions of the work not specifically addressed in the plans and specifications but required to produce a whole and complete project, such work will be considered subsidiary to the bid items.

2. INCIDENTAL WORK

Incidental work items for which separate payment is not measured includes, but is not limited to, the following items:

- a. Clearing, grubbing and stripping (unless otherwise paid for)
- b. Clean up
- c. Plugging existing sewers and manholes
- d. Signs
- e. Mobilization/Demobilization (unless otherwise paid for)
- f. Restoration of property
- g. Cooperation with other contractors, abutters and utilities.
- h. Utility crossings, (unless otherwise paid for)
- i. Minor items - such as replacement of fences, guardrails, rock wall, etc.
- j. Steel and/or wood sheeting as required.
- k. Accessories and fasteners or components required to make items paid for under unit prices or lump sum items complete and functional.

3. ALTERATION OF PLANS OR OF CHARACTER OF WORK

The Owner reserves the right, without notice to Surety, to make such alterations of the plans or of the character of the work as may be necessary or desirable to complete fully and acceptably the proposed construction; provided that such alterations do not increase or decrease the contract cost. Within these cost limits, the alterations authorized in writing by the Owner shall not impair or affect any provisions of the Contract or bond and such increases or decreases of the quantities as a result from these alterations or deletions of certain items, shall not be the basis of claim for loss or for anticipated profits by the contractor. The contractor shall perform the work as altered at the contract unit price or prices.

4. EXTRA WORK ITEMS

Extra work shall be performed by the Contractor in accordance with the specifications and as directed, and will be paid for at a price as provided in the Contract documents or if such pay items are not applicable than at a price negotiated between the contractor and the Owner or at the unit bid price. If the Owner determines that extra work is to be performed, a change order will be issued.

5. CHANGE ORDERS

The Owner reserves the right to issue a formal change order for any increase, decrease, deletion, or addition of work or any increase in contract time or price. The contractor shall be required to sign the change order and it shall be considered as part of the Contract documents.

6. FINAL CLEANING UP

Before acceptance of the work, the contractor shall remove from the site all machinery, equipment, surplus materials, rubbish, temporary buildings, barricades and signs. All parts of the work shall be left in a neat and presentable condition. On all areas used or occupied by the contractor, regardless of the contract limits, the bidder shall clean-up all sites and storage grounds.

The items prescribed herein will not be paid for separately, but shall be paid for as part of the total contract price.

7. ERRORS AND INCONSISTENCY IN CONTRACT DOCUMENTS

Any provisions in any of the Contract Documents that may be in conflict with the paragraphs in these General Requirements shall be subject to the following order of precedence for interpretation.

1. Technical Specifications will govern General Requirements.
2. Special Provisions will govern Technical Specifications.
3. Plans will govern Special Provisions, Technical Specifications, and General Requirements.

CONTROL OF WORK

1. AUTHORITY OF ENGINEER

(a) All work shall be done under supervision of the City Engineer and to his satisfaction. The City Engineer will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work; all questions that may arise as to the interpretation of the plans and specifications; and all questions as to the acceptable fulfillment of the Contract by the Contractor.

(b) The City Engineer will have the authority to suspend the work wholly or in part for such periods as he may deem necessary due to the failure of the Contractor to correct conditions unsafe for workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for conditions considered unsuitable for the prosecution of the work, including unfit weather; or for any other condition or reason deemed to be in the public interest. The Contractor shall not be entitled any additional payments arising out of any such suspensions.

(c) The Owner reserves the right to demand a certificate of compliance for a material or product used on the project. When the certificate of compliance is determined to be unacceptable to the City Engineer the Contractor may be required to provide engineering and testing services to guarantee that the material or product is suitable for use in the project, at its expense (see Sample of Certificate of Compliance).

2. PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPES

(a) The Contractor shall use every precaution to prevent injury or damage to wires, poles, or other property of public utilities; trees, shrubbery, crops, and fences along and adjacent to the right-of-way, all underground structures such as pipes and conduits, within or outside of the right-of-way; and the Contractor shall protect and carefully preserve all property marks until an authorized agent has witnessed or otherwise referenced their location.

(b) The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in his manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.

(c) When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or as a result of the failure to perform work by the Contractor, the Contractor shall restore, at its own expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing rebuilding, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

(d) The Contractor shall paint with tree paint all scars made on fruit or ornamental trees by equipment, construction operations, or the removal of limbs larger than one inch in diameter. Damaged trees must be replaced if so determined by the City Arborist, in his or her sole discretion.

(e) If the Contractor fails to repair, rebuild or otherwise restore such property as may be deemed necessary, the Owner, after 48 hours notice, may proceed to do so, and the cost thereof may be deducted from any money due or which may become due the Contractor under the contract.

(f) It is the intent of the Parties that the Contractor preserve, to as great an extent as possible, the natural features of the site.

(g) Manhole and/or catch basin castings, frames, covers, and grates shall be protected and preserved during construction. A careful inventory shall be kept regarding which frames and covers/grates were removed so they can

CONTROL OF WORK (continued)

be replaced in the proper location. Any damaged or missing frames, covers, or grates shall be replaced by the contractor at no cost to the owner.

3. MAINTENANCE DURING CONSTRUCTION

The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and workers to ensure that the structure is kept in satisfactory conditions at all times.

4. SAFETY PRECAUTIONS

Upon commencement of work, the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions necessary to ensure the safety of employees on the site, other persons who may be affected thereby, including the public, and other property at the site or adjacent thereto.

5. PERMITS

It will be the responsibility of the Contractor to obtain all permits required for the operation of equipment in, or on, all city streets and public ways.

6. BARRICADES, WARNING SIGNS AND TRAFFIC OFFICERS

(a) The Contractor shall provide, erect and maintain all necessary barricades, suitable and sufficient lights, danger signals, signs and other traffic control devices, and shall take all necessary precautions for the protection of the work and safety of the public. Roadway closed to traffic shall be protected by effective barricades. Obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to control and direct traffic in a proper manner, as approved by the engineer.

(b) The Contractor will be held responsible for all damage to the work from traffic, pedestrians, animals or any other cause due to lack of adequate controlling devices.

(c) The Contractor shall provide such police officers as the City Engineer deems necessary for the direction and control of traffic within the site of project.

The work prescribed herein will not be paid for separately but will be paid for as part of the Contract Price unless specifically appearing as a bid item.

TEMPORARY FACILITIES

1. STORAGE FACILITIES

(a) The Contractor shall not store materials or equipment in a public right-of-way beyond the needs of one working day. Equipment and materials shall be stored in an approved location.

(b) The Contractor shall protect all stored materials from damage by weather or accident and shall insure adequate drainage at and about the storage location.

(c) Prior to final acceptance of the work all temporary storage facilities and surplus stored materials shall be removed from the site.

2. SANITARY FACILITIES

(a) The Contractor shall provide for toilet facilities for the use of the workers employed on the work.

(b) Temporary toilet facilities may be installed provided that the installation and maintenance conform with all State and local laws, codes, regulations and ordinances governing such work. They shall be properly lit and ventilated, and shall be kept clean at all times.

(c) Prior to final acceptance of the work all temporary toilet facilities shall be removed from the site.

3. TEMPORARY WATER

The Contractor shall make all arrangements with the local water department for obtaining water connections to provide the water necessary for construction operations and shall pay all costs.

4. TEMPORARY ELECTRICITY

The Contractor shall make all arrangements with the Public Service Company for obtaining electrical connections to provide the electrical power necessary for construction operations and security lighting and shall pay all electrical connection and power costs.

The Contractor shall be responsible with obtaining an electrical permit from the City Electrical Inspector.

INSURANCE REQUIREMENTS

Insurance shall be in such form as will protect the Contractor from all claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract whether such operation by himself or by anyone directly or indirectly employed by him.

AMOUNT OF INSURANCE

- A) Commercial General Liability:
Bodily injury or Property Damage - \$2,000,000
Per occurrence and general aggregate
- B) Automobile and Truck Liability:
Bodily Injury or Property Damage - \$2,000,000
Per occurrence and general aggregate

Additionally, the Contractor shall purchase and maintain the following types of insurance:

- A) Workers Comprehensive Insurance coverage in at least statutorily required amounts for all people employed by the Contractor to perform work on this project.
- B) Contractual Liability Insurance coverage in the amounts specified above under Comprehensive General Liability.
- C) Product and Completed Operations coverage to be included in the amounts specified above under Comprehensive General Liability.

ADDITIONAL INSURED

All liability policies (including any excess policies used to meet coverage requirements) shall include the City of Portsmouth, New Hampshire as named Additional Insured.

- 1) The contractor's insurance shall be primary in the event of a loss.
- 2) The Additional Insured endorsement must include language specifically stating that the entity is to be covered for all activities performed by, or on behalf of, the contractor, including the City of Portsmouth's general supervision of the contractor.
- 3) City of Portsmouth shall be listed as a Certificate Holder and Additional Insured. The City shall be identified as follows:

City of Portsmouth
Attn: Legal Department
1 Junkins Avenue
Portsmouth, NH 03801

MEASUREMENT AND PAYMENT

1. MEASUREMENT OF QUANTITIES

- (a) All work completed under the contract will be measured according to the United States standard measure.
- (b) The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice. Unless otherwise stated all quantities measured for payment shall be computed or adjusted for "in place" conditions.
- (c) Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures having an area of 9 square feet or less. Unless otherwise specified, transverse measurements for area computations will be the dimensions shown on the plans or ordered in writing.
- (d) Structures will be measured according to lines shown on the plans or as ordered unless otherwise provided for elsewhere in the specifications.
- (e) In computing volumes of excavation, embankment, and borrow, the average end area method will be used. Where it is impracticable to measure by the cross-section method, acceptable methods involving three-dimensional measurement may be used. When measurement of borrow in vehicles is permitted, the quantity will be determined as 80 percent of the loose volume.
- (f) In computing volumes of concrete, stone and masonry, the prismatic method will be used. The term "ton" will mean the short ton consisting of 2,000 pounds avoirdupois.
- (g) Except as specified below, all materials that are measured or proportioned by weight shall be weighed on scales which the Contractor has had sealed by the State or by a repairman registered by the Commissioner of Agriculture. All weighing shall be performed in a manner prescribed under the Rules and Regulations of the Bureau of Weights and Measures of the New Hampshire Department of Agriculture.
- (h) Weighing of materials on scales located outside New Hampshire will be permitted for materials produced or stored outside the state, when requested by the Contractor and approved. Out-of-state weighing in order to be approved, must be performed by a licensed public weigh master or a person of equal authority in the state concerned on scales accepted in the concerned state.
- (i) Each truck used to haul material being paid for by weight shall bear a plainly legible identification mark, and if required, shall be weighed empty daily at such times as directed.
- (j) When material is weighed, the individual weight slips, which shall be furnished by the Contractor, for trucks, trailers, or distributors, shall show the following information: the date; the project; the material or commodity; the dealer or vendor; the Contractor or Subcontractor; the location of the scales; the vehicle registration number or other approved legible identification mark; the tare and net weights, with gross weights when applicable; and the weigher's signature or his signed initials.
- (k) The right is reserved to weight any truck, trailer, or distributor, at locations designated, before and after making deliveries to the project.
- (l) Bituminous materials will be measured by the gallon or ton.

MEASUREMENT AND PAYMENT (continued)

(m) When material is specified to be measured by the cubic yard but measurement by weight is approved, such material may be weighed and the weight converted to cubic yards for payment purposes. Necessary conversion factors will be determined by the Owner.

(n) The term "lump sum" when used as an item of payment will mean complete payment for the work described in the item.

(o) When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories, so as to provide the item complete and functional. Except as may be otherwise provided, partial payments for lump sum items will be made approximately in proportion to the amount of the work completed on those items.

(p) Material wasted without authority will not be included in the final estimate.

2. SCOPE OF PAYMENT

(a) The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials and for performing all work under the contract in a complete and acceptable manner and for all risk, loss, damage or expense of whatever character arising out of the nature of the work or the prosecution thereof.

(b) The Contractor shall be liable to the Owner for failure to repair, correct, renew or replace, at his own expense, all damage due or attributable to defects or imperfections in the construction which defects or imperfections may be discovered before or at the time of the final inspection and acceptance of the work.

(c) No monies, payable under the contract or any part thereof, except the first estimate, shall become due or payable if the Owner so elects, until the Contractor shall satisfy the Owner that the Contractor has fully settled or paid all labor performed or furnished for all equipment hired, including trucks, for all materials used, and for fuels, lubricants, power tools, hardware and supplies purchased by the Contractor and used in carrying out said contract and for labor and parts furnished upon the order of said Contractor for the repair of equipment used in carrying out said contract; and the Owner, if he so elects, may pay any and all such bills, in whole or in part, and deduct the amount of amounts so paid from any partial or final estimate, excepting the first estimate.

3. COMPENSATION FOR ALTERED QUANTITIES

(a) Except as provided for under the particular contract item, when the accepted quantities of work vary from the quantities in the bid schedule the Contractor shall accept as payment in full, so far as contract items are concerned, at the original contract unit prices for the accepted quantities of work done. No allowance will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense on the part of the Bidder and subsequent loss of expected reimbursements therefore or from any other cause.

(b) Extra work performed will be paid for at the contract bid prices or at the price negotiated between the Owner and the Contractor if the item was not bid upon. If no agreement can be negotiated, the Contractor will accept as payment for extra work, cost plus 15% (overhead and profit). Costs shall be substantiated by invoices and certified payroll.

MEASUREMENT AND PAYMENT (continued)**4. PARTIAL PAYMENTS**

Partial payments of work accepted by the City will be made on a monthly basis during the contract period minus the retainage amount. See Article VI of the Contract Agreement regarding retainage schedule.

5. FINAL ACCEPTANCE

Upon due notice from the Contractor of presumptive completion of the entire project, the City Engineer will make an inspection. If all construction provided for and contemplated by the contract is found complete to his satisfaction, this inspection shall constitute the final inspection and the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

If, however, the inspection discloses any work in whole or in part, as being unsatisfactory, the City Engineer will give the Contractor the necessary instructions for correction of such work, and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such event, the City Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

6. ACCEPTANCE AND FINAL PAYMENT

(a) When the project has been accepted and upon submission by the Contractor of all required reports, completed forms and certifications, the Owner will review the final estimate of the quantities of the various classes of work performed. The Contractor may be required to certify that all bills for labor and material used under this contract have been paid.

(b) The Contractor shall file with the Owner any claim that the Contractor may have regarding the final estimate at the same time the Contractor submits the final estimate. Failure to do so shall be a waiver of all such claims and shall be considered as acceptance of the final estimate. From the total amount ascertained as payable, an amount equal to two percent (2%) of the whole will be deducted and retained by the Owner for the guaranty period.

(c) All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

7. GENERAL GUARANTY AND WARRANTY OF TITLE

(a) Neither the final certification of payment nor any provision in the contract nor partial or entire use of the improvements embraced in this Contract by the Owner or the public shall constitute an acceptance of work not done in accordance with the Contract or relieve the Contractor of liability in respect to any express or implied warranties or responsibility for faulty materials or workmanship. The Contractor shall promptly remedy any defects in the work and pay for any damage to other work resulting therefrom which shall appear within a period of twelve (12) months from the date of final acceptance of the work. The Owner will give notice of defective materials and work with reasonable promptness.

(b) No material, supplies or equipment to be installed or furnished under this Contract shall be purchased subject to any chattel mortgage or under a conditional sale, lease purchase or other agreement by which an interest therein or in any part thereof is retained by the Seller or supplier. The Contractor shall warrant good title to all materials, supplies and equipment installed or incorporated in the work and upon completion of all work, shall deliver the same together with all improvements and appurtenances constructed or placed thereon by him to the Owner free from any claims, liens or charges. Neither the Contractor nor any person, firm or corporation furnishing

MEASUREMENT AND PAYMENT (continued)

any material or labor for any work covered by this Contract shall have the right to a lien upon any improvements or appurtenances thereon.

Nothing contained in this paragraph, however, shall defeat or impair the right of persons furnishing materials or labor to recover under any bond given by the Contractor for their protection or any rights under any law permitting such persons to look to funds due the Contractor in the hands of the Owner. The provisions of this paragraph shall be inserted in all subcontractors and material contracts and notice of its provisions shall be given to all persons furnishing materials for the work when no formal contract is entered into for such materials.

8. NO WAIVER OF LEGAL RIGHTS

(a) Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or be stopped from recovering from the Contractor or his Surety, or both, such overpayment as it may sustain by failure on the part of the Contractor to fulfill his obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

(b) The Contractor, without prejudice to the Contract shall be liable to the terms of the Contract, shall be liable to the Owner for latent defects, fraud or such gross mistakes as may amount to fraud, and as regards the Owner's right under any warranty or guaranty.

9. TERMINATION OF CONTRACTOR'S RESPONSIBILITY

Whenever the improvement provided for by the Contract shall have been completely performed on the part of the Contractor and all parts of the work have been released from further obligations except as set forth in his bond and as provided in Section 8 above.

SHOP DRAWINGS

Shop Drawings for this project shall be submitted under the following conditions:

1. The Contractor shall submit working and detail drawings, well in advance of the work, to the City Engineer for review.
2. The Contractor's drawings shall consist of shop detail, erection and other working plans showing dimensions, sizes and quality of material, details and other information necessary for the complete fabrication and erection of the pertinent work.
3. The Contractor shall submit two (2) sets of drawings to the City Engineer.
4. Prior to the approval of the drawings, any work done or materials ordered for the work involved shall be at the Contractor's risk.
5. One (1) set of the drawings will be returned to the Contractor approved or marked with corrections to be made. After approval has been given, the Contractor shall supply the City Engineer with two sets of the revised detail working drawings.
6. The City Engineer's approval of the Contractor's working drawings will not relieve the Contractor from responsibility for errors in dimensions or for incorrect fabrication processes, or from responsibility to complete the contract work.

STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of the State of New Hampshire Department of Transportation and any Addenda shall apply to all technical and measurement aspects of this project only.

However, the Standard Specifications for Road and Bridge Construction of the State of New Hampshire Department of Transportation and any Addenda shall NOT apply to General Requirements, Control of Work, Temporary Facilities, Payment, Insurance Requirements, etc. **with the exception that pavement escalation will be allowed in accordance with the NHDOT standard specifications.**

TECHNICAL SPECIFICATIONS

As noted above, the Standard Technical Specifications for this project are the Standard Specifications for Road and Bridge Construction of the State of New Hampshire Department of Transportation and any Addenda shall apply to all technical and measurement aspects of this project only.

SPECIAL PROVISION

AMENDMENT TO SECTION 306 – RECLAIMED STABILIZED BASE

<u>ITEM 306.208</u>	<u>RECLAIMED STABILIZED BASE REMOVED AND REHANDLED, 8” DEEP (F)</u>	<u>SQUARE YARD</u>
<u>ITEM 306.36</u>	<u>STONE FOR RECLAIMED STABILIZED BASE</u>	<u>TON</u>

The work under these items shall conform to the relevant provisions of Section 306 of the Standard Specifications and the following.

Add to Description:

1.2 The following work shall be included in the item:

1.2.1 Lower existing utility structures to a depth below the material to be scarified.

1.2.2 Prepare road surface in accordance with reclaimer manufacturer recommendations.

1.2.3 Reclaim roadway to specifications listed below.

1.2.4 Regrade stabilized base according to typical section.

1.2.5 Provide additional material or remove excess material to achieve the required profile and cross-section.

1.2.6 Raise existing utility structures as specified.

1.3 The following work shall not be included in the item:

1.3.1 Reclamation of pavement beyond the limit of work for the convenience of the Contractor. Strict attention shall be made to minimize damage to pavement outside the limit of work.

Materials

Add to 2.1

2.1.4 Additional stone for reclaimed stabilized base shall be 1 ½” – 2” angular crushed stone.

Construction Requirements

Add to 3.1:

3.1.1 Use only a self-propelled or towed reclaiming machine specifically designed to process the existing asphalt surface and a specified amount of subsurface gravel to the tolerances specified herein.

3.1.2 Equipment Needed: Hammer Mill, Bomag type reclaimer or other approved equivalent, grader, water truck, vibratory roller, towing unit for reclaiming unit if not self-propelled.

Add to 3.5:

3.5.1 If required by the engineer, Contractor shall take samples of the existing pavement and base gravel to determine the need for additional gravel and bituminous asphalt. Samples shall be taken at an interval of not less than one every 200 linear feet of roadway to be reclaimed.

3.5.2 Testing shall be performed at an NHDOT approved laboratory in accordance with AASHTO T 164.

Add 3.13:

3.13.1 All utility structures shall be lowered to prevent damage by the processing.

3.13.2 Where applicable, cut pavement according to Section 02555 of the Specifications.

3.13.3 The road surface and an approximately equal thickness of gravel base shall be reclaimed.

3.13.4 Reclaiming:

3.13.4.1 Apply water to insure optimum water content.

3.13.4.2 The reclaimer shall process the material to the specified gradation.

3.13.4.3 The process shall be repeated until the "Stabilized Base" meets the required specification.

3.13.5 Placement of the Stabilized Base:

3.13.5.1 Where specified remove the stabilized base and perform the necessary regrading of the underlying roadbed in accordance with the plans and profiles, typical specifications or as directed by the Engineer.

3.13.5.2 The stabilized base shall be compacted in accordance with NHDOT Section 304, "Aggregate Base Course", current edition.

3.13.5.3 The finish grade shall not vary more than plus or minus a quarter inch (+/- 1/4") from a ten foot (10') straight line applied parallel to or perpendicular to the centerline.

3.13.5.3 Excess material becomes the property of the contractor unless otherwise specified on the contract drawings or in Section 01611 - Owner's Right to Materials, of this document.

3.14. Contractor shall sawcut existing drives in accordance with the standard details on the plans.

SPECIAL PROVISION
AMENDMENT TO SECTIONS 401 AND 403

<u>ITEM 403.11(B,H,W)</u>	<u>HOT BITUMINOUS PAVEMENT, MACHINE METHOD</u>	<u>TON</u>
<u>ITEM 403.12</u>	<u>HOT BITUMINOUS PAVEMENT, HAND METHOD</u>	<u>TON</u>
<u>ITEM 403.13L</u>	<u>HOT BITUMINOUS PAVEMENT, HAND METHOD PATCHING</u>	<u>SY</u>
<u>ITEM 403.13S</u>	<u>HOT BITUMINOUS PAVEMENT, HAND METHOD PATCHING</u>	<u>SY</u>

The work under these items shall conform to the relevant provisions of Sections 401 and 403 of the Standard Specifications and the following.

Description

1.1 Description

- A. Work Included: Furnish and install bituminous concrete pavement courses in accordance with Sections 401 of the NHDOT Standard Specifications for Road and Bridge Construction (latest edition) and as specified in this section.
- B. All reference to NHDOT, NHDOT personnel or the Department may be construed as the Engineer, the City of Portsmouth, their agents and their representatives.

1.2 Quality Assurance

- A. Work shall conform to NHDOT Section 401, Tier 2 except as noted herein:
 - 1. Ride Smoothness: Section 401.3.17.3.4.1 shall apply except variations exceeding **3/8** inch in profile or cross slope shall be eliminated.
 - 2. Ride Smoothness: Section 401.3.17.3.4.4 shall apply except high points **0.5** inches in 25 feet shall corrected.

Materials

2.1 Materials

- A. Materials shall conform to NHDOT Section 401 except the following:
 - 1. **The maximum amount of Total Reused Binder (TRB) in the pavement mix design shall be .5% and the mix shall meet all volumetric mix design criteria.**
 - 2. Asphalt Cement shall not contain any form of used, recycled or refined oil. Suppliers of PG Binder shall certify that the PG Binder does not contain any used, recycled or refined oil.
 - 3. All 1/2" (12mm), 3/4" inch (19mm) and 1 inch (25mm) pavement mixes shall be designed using the 50 gyration N design, unless specified otherwise.
 - 4. Liquid asphalt cement binder shall have a Performance Grade (PG) of PG 64-28 for all standard bituminous and PG 64-E for all high strength bituminous pavements.
 - 5. All high strength asphalt, when specified, shall be 50 gyration unless otherwise directed.

2.2 Pavement Mix Designs

Pavement mix designs shall meet NHDOT Section 401.2.5.1 except the following:

- A. Minimum asphalt binder content shall be as follows:

Minimum Asphalt Binder Content		
Mix Type	50 Gyration	75 Gyration*
3/8-in (9.5 mm)	6.3	5.9
1/2-inch (12.5 mm)	5.9	*
3/4-inch (19 mm)	5.3	*

The required minimum asphalt content is based on the use of aggregate with a specific gravity of 2.65 to 2.70. The minimum asphalt content requirement may be adjusted when aggregate with a higher specific gravity is used, or the minimum may be adjusted at the Engineer’s discretion if it is believed to be in the best interest of the Owner. All mix designs shall be submitted to the Engineer for verification and approval.

*75 Gyration mix is not allowed for these sizes without express written permission of the engineer.

- B. Method Requirements NHDOT Section 401.2.6 shall apply including the following:
 1. Coarse Aggregate: Stockpiled coarse aggregate shall meet the requirements of 2.6.1, Table 2.
 2. Tolerances: All mixtures shall conform within the range of tolerances provided in NHDOT Section 401.2.6.2
 3. When Non-Compliant test result, it shall be the Contractor’s responsibility to correct non-compliant pavement. The Contractor may be required to remove non-compliant material that is poorly graded or material exhibiting cracks, open joints or other imperfections (**no payment will be made for this material or its removal**).

Construction Requirements

Construction requirements shall be in accordance with Sections 401 of the NHDOT Standard Specifications for Road and Bridge Construction (latest edition) **and** as specified in this section.

1. Prior to placing any mix, a mix design shall be submitted for approval and pre-paving conference shall be held with the Owner, Contractor, and Engineer to discuss the proposed paving schedule, source of mix, type and amount of equipment to be used, sequence of paving pattern, rate of mix supply, traffic control, and general continuity of the operation. Special attention shall be made to the paving pattern sequence to minimize cold joints.
2. The Contractor shall notify the Engineer one week in advance of paving operations to allow sufficient time for scheduling personnel.
3. Any pavement course four inches (compacted depth) or greater shall be placed and compacted in two lifts.
4. Sweeping. Existing pavement or previously laid courses shall be thoroughly dry and free from all dust, dirt, and loose material. Sweeping with a power broom, supplemented by hand brooming, may be necessary.
5. Tack coat. Surfaces of any pavement course shall have a tack coat of emulsified asphalt applied in accordance with NHDOT Specifications. Application of emulsified asphalt shall be between 0.03 and 0.05 gal/yd².
6. Joint adhesive shall be used for all transverse and lateral seams when placing more than 100 tons of asphalt or more. This item is subsidiary unless a separate pay item is provided.

6. Utility covers, frames and grates, valves and other castings shall be set and raised. Contact surfaces of the drainage and utility castings shall be painted with a thin coating of suitable bituminous material. Surface pavement shall be removed from covers and castings immediately following pavement operations.
7. Method requirements NHDOT Section 401.3.1.2 shall apply.
8. In addition to 3.1.A.7 above, the following performance requirements shall apply:
 - a). Tier 2 QA/QC performance requirements shall apply.
 - b). Ride Smoothness: NHDOT Section 401.3.17.3.4.1 shall apply except variations exceeding $\frac{3}{8}$ inch in profile or cross slope shall be eliminated.
 - c). Ride Smoothness: Section 401.3.17.3.4.4 shall apply except high points 0.5 inches in 25 feet shall be corrected.
9. For items 403.13L and 403.13S remove existing asphalt and gravel as needed. Saw cut edges, pave in two lifts a new asphalt patch using hand work or machine as appropriate.

Method of Measurement

Patches completed under items 403.13L and 403.13S will be measured by the square yard of road successfully repaired. All other items listed here will be measured in accordance to the standard specifications.

Basis of Payment

Patches completed under items 403.13L and 403.13S will be paid for by the square yard of road successfully repaired. Excavation of existing asphalt, preparing the hole for pavement to a depth of 4" below the surface and paving in the hole with hot mix asphalt are all included in the pay item. No additional payment will be made unless the crushed gravel under the existing pavement needs to be replaced, and then the quantity will be paid for under items 203.1 and 304.3 respectively.

All other pavement items will be paid for in accordance to the standard specifications.

SECTION 604**CATCH BASINS, DROP INLETS, AND MANHOLES FRAMES, GRATES AND COVERS**

Amend Section 604 to include:

Materials

Add 2.11: Catch basin frames and grates to be replaced shall NHDOT Type B and be fabricated in the USA.

Add 2.12: 32" Drain manhole frames and covers to be replaced shall dual hinged, Ergo XL from EJIW – 41421025L01. 32" Hinged and gasketed with locking cam and must be fabricated in the USA. 24" Covers to be replaced must be EJIW – 001040029L02 or approved equal with locking cam fabricated in the USA.

Add 2.13: 32" Sewer manhole frames and covers are dual hinged Ergo XL from EJIW – 32" Hinged and gasketed with locking cam and are fabricated in the USA. Covers have the City Logo and will be provided by the City and then installed normally. The Contractor will need to pick up and transport the SMH covers from the Portsmouth DPW yard. 24" Covers to be replaced must be EJIW – 001040030L01 or equal with locking cam or equal fabricated in the USA and must be approved for use by the Department.

Add 2.14: Structures that are adjusted will be backfilled with high early strength excavatable Flowable Fill.

Add 2.15: Bricks shall be Grade SS, Hard Brick

Add 2.16: Mortar for bricks shall be composed of 1 part portland cement, ½ part hydrated lime and 3 parts sand with Portland cement being Type II and the Hydrated Lime being type S.

Construction Requirements

Add 3.10: Use only clean bricks laid in a bed of mortar so that all bricks are uniform and smooth on the inside of the structure. All Bricks shall be laid perpendicular to the manhole so that only the butt ends of the brick are showing to maximize bearing capacity.

Add 3.11: Remove all loose material from excavation around structures to ensure no compaction failures will occur.

Add 3.12: Place Flowable Fill to within 2" of the surface and after the material has set up sufficiently, pave with 3/8" bituminous hot wearing course mix around each structure up to the surrounding grade of the remaining pavements surrounding the structure excavation.

Add 3.13: Each structure that is reset must have the Flowable Fill placed and the perimeter paved around before opening the lane back up to traffic. Structures like catch basins that are not in the traveled way do not need to be paved around during the same work day as long as the Flowable Fill has been installed and they are protected overnight by appropriate approved warning devices. All lanes must be open to traffic at the end of the day.

Basis of Payment

Amend 5.2: Any Catch basins or manhole frames where the frame is purchased and installed (items, 604.611, 604.62, 604.621, 604.72 will be measured by Vertical Foot from the bottom of the frame adjusted to the surface that is undisturbed. Manholes or CB's where the frame is

retained for reuse, or SMH's provided by the City (item 604.61) will be measured including the height of the frame and the 1' vf pay minimum pay qty in the standard specifications will apply.

If the top of the surface undisturbed is non uniform in elevation, the average height will be used. Sound masonry material shall not be removed without the Engineer's approval. All measurements will be to the nearest .1 of a foot.

Pay Items

403.12	Hot Bituminous Asphalt, Hand Method	Ton
520.421	Excavatable Flowable Fill	Cy
604.0007	Install Polyethylene liner under CB F&G	Ea
604.4	Adjust <u>Existing</u> CB Frame and Grate to grade brick with mortar Or repair CB structure under new F&G	Vf
604.51	Adjust SMH Covers to grade with brick and mortar repairing brick Corbel under the cover as necessary	Vf
604.52	Adjust DMH Covers to grade with brick and mortar repairing brick Corbel under the cover as necessary	Vf
604.61	Install SMH Cover provided for pick up at the City DPW Building	Ea
604.611	Provide and Install 24" SMH Cover purchased by the Contractor	Ea
604.62	Provide and Install DMH Cover purchased by the Contractor	Ea
604.621	Provide and Install 24" DMH Cover purchased by the Contractor	Ea
604.72	Provide and Install CB Type B F&G purchased by the Contractor	Ea

SPECIAL PROVISION

AMENDMENT TO SECTION 609 – Curbing Installation

Item 609.01, 609.02

Materials:

Add to 2.1: Curbing will be manufactured by Swenson Granite Works, Concord NH.

Basis of Payment:

Amend 5.3: Class A Concrete backfill will be used for curb installation and will be paid for under item 520 by the cubic yard installed.

SPECIAL PROVISION

AMENDMENT TO SECTION 618.6 – Uniformed Officers

AMENDMENT TO SECTION 618.7 – Traffic Control Flaggers

618.6 UNIFORMED OFFICERS

Portsmouth Police will be hired at the discretion of the Engineer. Only Portsmouth Police can be hired for police traffic details unless other officers are assigned by Portsmouth PD.

618.7 TRAFFIC CONTROL FLAGGERS

Whenever the contractor is working in areas where uniformed officers are not required by the City, flaggers may be hired under the discretion of the Engineer.

Method of Measurement:

The uniformed officer work shall be measured by the exact cost billed to the contractor based on the man-hours worked.

The flagger work shall be measured by the exact cost billed to the contractor based on the man-hours worked. The City shall approve the flagging company and labor rate prior to the beginning of the work.

Basis of Payment:

This work shall be paid for from the Contract Price Allowance as listed under Items 618.6 & 618.7 in the Bid Proposal Form using the actual cost of the labor on the project.

SPECIAL PROVISION**AMENDMENT TO SECTION 619 – Maintenance of Traffic****Add to 619:**Construction Requirements

All work shall be prosecuted so pedestrian and traffic flow can be maintained. Only one travel lane closure at a time will be allowed without prior approval from the Engineer.

The Contractor will develop both a construction staging and traffic control plan for this project. The plans shall be submitted to be approved by the Engineer.

Work on Grafton Drive will need to be performed during off-peak hours only. Work will not be allowed between the hours of 7AM to 6PM Monday through Friday. It will be the Contractor's option to do the work either during the weekend or at night (or a combination of both). The costs for nighttime illumination of intersections and all night time traffic control devices as determined to be needed will be covered by this item.

Dust and traffic control as may be ordered by the Engineer will be paid for under this item.

Method of Measurement:

The traffic control items shall be measured on a unit basis under Maintenance of Traffic.

All costs associated with the application of these measures or other measures directed by the Engineer shall be paid for under these items and will not be further chargeable to the project, except as stipulated and specified under Contract Items.

Basis of Payment:

This work shall be paid for from the Contract Unit Price as listed under Item 619 (Maintenance of Traffic). This unit price shall include all equipment, materials and labor thereto.

March 15, 2013

**SPECIAL ATTENTION
ASPHALT CEMENT ADJUSTMENT**

All bid items involving asphalt concrete mixtures (except items 403.4 & 403.6) listed in Sections: 403, Hot Bituminous Pavement and 411, Plant Mix Surface Treatment; containing asphalt cement will be subject to a price adjustment. This adjustment will take effect when the monthly price for asphalt cement as furnished by the Bureau of Materials and Research differs from the base price contained in the proposal.

The price adjustment will be based on the percent of virgin asphalt cement stated in the Approved Mix Design containing the maximum percentage of reclaimed asphalt pavement. In the event of breakdown or unforeseen circumstances other than weather, an Approved Virgin Mix Design may be used. The price adjustment will then be based on the total percent of virgin asphalt cement in that approved design.

**The base price* of asphalt cement for this Contract is:
\$ xxx.xx per ton on English Projects.**

* Source: The base price is developed from data published in the *Asphalt Weekly Monitor*, a publication from Poten and Partners, Inc. (Applies to contracts advertised after January 1, 2012)

The **monthly price** of asphalt cement will be furnished by the Bureau of Materials and Research on the first business day following the 14th calendar day of each month.

The contract prices of Hot Bituminous Pavement, Recycled Bituminous Pavement and Plant Mix Surface Treatment will be paid under the respective items in the contract. The price adjustment, as provided herein, upwards or downwards, will be made at the end of each month in which the work was accomplished as follows:

A contract adjustment will be made under Item 1010.2 based on; [monthly price minus the base price] X [Approved Mix Design percent of virgin asphalt cement] X [tons of pavement used].

When no item for Asphalt Cement Adjustment is included in the contract no adjustments will be made.

Item 1010.2 Asphalt Cement Adjustment 1 Dollar
1 Not a bid item

Preliminary Street List

Streets may be added or removed as budget allows

Mobilization and Maintenance of Traffic items will be paid according to the predetermined ratio schedule listed under each street.

Regina Rd (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11	1.5" of 3/8" Machine Pave	522	Tons
403.12	Hand Method Pave	26	Tons
403.6	Pavement Joint Adhesive	1938	Lf
410.22	Tack Coat (Subsidiary)	6396	Sy
413	Crack Sealant	3000	Lb
417A	Cold Planing of Butt Joints	140	Sy
618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.04	Ls
632.0104	4" Painted Lane Striping	268	Lf
632.3112	12" Thermoplastic Line	22	Lf
641	Loam & Seed	35	Cy
692	Mobilization	0.04	U

Gosport Rd (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11	1.5" of 3/8" Machine Pave	914	Tons
403.12	Hand Method Pave	39	Tons
403.6	Pavement Joint Adhesive	3000	Lf
410.22	Tack Coat (Subsidiary)	11133	Sy
413	Crack Sealant	3000	Lb
417	Cold Planing	4530	Sy
604.45	Adjust CB or MH Covers	30	Lf
604.6130S	Provide and Install New 30" Hinged SMH Frame and Cover	1	Ea
604.6130D	Provide and Install New 30" Hinged DMH Frame and Cover	1	Ea
611.90001	Adjusting Water Gates	14	Ea
618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.08	Ls
632.0104	4" Painted Lane Striping	60	Lf
632.3112	12" Thermoplastic Line	88	Lf
641	Loam & Seed	1	Cy
692	Mobilization	0.08	U

Odiorne Point Rd (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11	1.5" of 3/8" Machine Pave	1123	Tons
403.12	Hand Method Pave	40	Tons
403.6	Pavement Joint Adhesive	1700	Lf
410.22	Tack Coat (Subsidiary)	13594	Sy
413	Crack Sealant	3000	Lb
417	Cold Planing	5570	Sy
604.45	Adjust CB or MH Covers	42	Lf
604.6130S	Provide and Install New 30" Hinged SMH Frame and Cover	1	Ea
604.6130D	Provide and Install New 30" Hinged DMH Frame and Cover	1	Ea
611.90001	Adjusting Water Gates	4	Ea
618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.08	Ls
632.0104	4" Painted Lane Striping	60	Lf
632.3112	12" Thermoplastic Line	66	Lf
641	Loam & Seed	1	Cy
692	Mobilization	0.08	U

Edgewood Rd (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11	1.5" of 3/8" Machine Pave	309	Tons
403.12	Hand Method Pave	18	Tons
403.13S	Pavement Patching <30 Square yards (50 gyr)	18	Sy
403.6	Pavement Joint Adhesive	868	Lf
410.22	Tack Coat (Subsidiary)	3819	Sy
417A	Cold Planing of Butt Joints	188	Sy
604.45	Adjust CB or MH Covers	12	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
604.6130S	Provide and Install New 30" Hinged DMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	3	Ea
611.90001	Adjusting Water Gates	2	Ea
618.7	Flaggers	8	Hr
619	Maintenance of Traffic	0.03	Ls
632.3112	12" Thermoplastic Line	30	Lf
641	Loam & Seed	9	Cy
692	Mobilization	0.03	U

Grant Ave (North of McKinley) (1.5" Overlay, Reclaim)

Item #	Description	Quantity	Unit
203.1	Common Excavation (Extra Reclaim)	55	Cy
214	Fine Grading	782	Sy
306.208	Reclaim and Rehandle	782	Sy
306.36	Stone for RSB	45	Tons
403.11B	2.5" Machine Pave	112	Tons
403.11	1.5" of 3/8" Machine Pave	424	Tons
403.12	Hand Method Pave	20	Tons
403.13L	Pavement Patching \geq 30 square yards (50 gyr)	103	Sy
403.13S	Pavement Patching <30 Square yards (50 gyr)	20	Sy
403.6	Pavement Joint Adhesive	1605	Lf
410.22	Tack Coat (Subsidiary)	5183	Sy
417A	Cold Planing of Butt Joints	137	Sy
604.45	Adjust CB or MH Covers	24	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
604.6124D	Provide and Install New 24" Hinged DMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	6	Ea
611.90001	Adjusting Water Gates	1	Ea
618.7	Flaggers	64	Hr
619	Maintenance of Traffic	0.044	Ls
632.3112	12" Thermoplastic Line	74	Lf
641	Loam & Seed	20	Cy
692	Mobilization	0.044	U

Coolidge Dr (North of McKinley) (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11	1.5" of 3/8" Machine Pave	280	Tons
403.12	Hand Method Pave	18	Tons
403.6	Pavement Joint Adhesive	1088	Lf
410.22	Tack Coat (Subsidiary)	3477	Sy
417A	Cold Planing of Butt Joints	98	Sy
604.45	Adjust CB or MH Covers	10	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	4	Ea
618.7	Flaggers	8	Hr
619	Maintenance of Traffic	0.02	Ls
632.3112	12" Thermoplastic Line	14	Lf
641	Loam & Seed	13	Cy

692	Mobilization	0.02	U
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Wilson Rd (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11	1.5" of 3/8" Machine Pave	366	Tons
403.12	Hand Method Pave	39	Tons
403.6	Pavement Joint Adhesive	1948	Lf
403.13L	Pavement Patching ≥30 square yards (50 gyr)	128	Sy
410.22	Tack Coat (Subsidiary)	4735	Sy
417A	Cold Planing of Butt Joints	146	Sy
604.45	Adjust CB or MH Covers	23	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
604.6124D	Provide and Install New 24" Hinged DMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	5	Ea
609.5	Reset Curb	94	LF
611.90001	Adjusting Water Gates	4	Ea
616.650	6' x 50' Traffic Signal Loop	1	Ea
618.7	Flaggers	24	Hr
619	Maintenance of Traffic	0.035	Ls
632.0104	4" Painted Lane Striping	310	Lf
632.3112	12" Thermoplastic Line	36	Lf
641	Loam & Seed	20	Cy
692	Mobilization	0.035	U

Taft Rd (North of McKinley) (1.5" Overlay, Reclaim)

Item #	Description	Quantity	Unit
203.1	Common Excavation (Extra Reclaim)	209	Cy
214	Fine Grading	3004	Sy
306.208	Reclaim and Rehandle	3004	Sy
306.36	Stone for RSB	170	Tons
403.11B	2.5" of 3/4" fine binder Machine Pave	350	Tons
403.11W	1.5" of 3/8" Machine Pave	732	Tons
403.12	Hand Method Pave	52	Tons
403.13L	Pavement Patching ≥30 square yards (50 gyr)	152	Sy
403.13S	Pavement Patching <30 Square yards (50 gyr)	80	Sy
403.6	Pavement Joint Adhesive	3014	Lf
410.22	Tack Coat (Subsidiary)	9162	Sy
417A	Cold Planing of Butt Joints	302	Sy
604.45	Adjust CB or MH Covers	42	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
604.6124D	Provide and Install New 24" Hinged DMH Frame and Cover	1	Ea

604.72	Provide and Install New CB Grate and Frame	4	Ea
611.90001	Adjusting Water Gates	6	Ea
618.7	Flaggers	96	Hr
619	Maintenance of Traffic	0.08	Ls
632.3112	12" Thermoplastic Line	72	Lf
641	Loam & Seed	28	Cy
692	Mobilization	0.08	U

Cleveland Dr (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11W	1.5" of 3/8" Machine Pave	329	Tons
403.12	Hand Method Pave	16	Tons
403.13S	Pavement Patching <30 Square yards (50 gyr)	54	Sy
403.6	Pavement Joint Adhesive	1310	Lf
410.22	Tack Coat (Subsidiary)	4038	Sy
417A	Cold Planing of Butt Joints	169	Sy
604.45	Adjust CB or MH Covers	9	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
611.90001	Adjusting Water Gates	1	Ea
618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.025	Ls
641	Loam & Seed	14	Cy
692	Mobilization	0.025	U

Pierce Place (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11W	1.5" of 3/8" Machine Pave	114	Tons
403.12	Hand Method Pave	14	Tons
403.13S	Pavement Patching <30 Square yards (50 gyr)	1	Sy
403.6	Pavement Joint Adhesive	543	Lf
410.22	Tack Coat (Subsidiary)	1501	Sy
604.45	Adjust CB or MH Covers	3	Lf
604.6124D	Provide and Install New 24" Hinged DMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	2	Ea
618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.008	U
641	Loam & Seed	5	Cy
692	Mobilization	0.008	U

Harrison Ave (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11W	1.5" of 3/8" Machine Pave	306	Tons
403.12	Hand Method Pave	18	Tons
403.13S	Pavement Patching <30 Square yards (50 gyr)	15	Sy
403.6	Pavement Joint Adhesive	1254	Lf
410.22	Tack Coat (Subsidiary)	3786	Sy
417A	Cold Planing of Butt Joints	113	Sy
604.45	Adjust CB or MH Covers	16	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
604.6124D	Provide and Install New 24" Hinged DMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	7	Ea
611.90001	Adjusting Water Gates	3	Ea
618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.025	U
632.3112	12" Thermoplastic Line	20	Lf
641	Loam & Seed	12	Cy
692	Mobilization	0.025	U

Polk Ave (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11W	1.5" of 3/8" Machine Pave	93	Tons
403.12	Hand Method Pave	11	Tons
403.6	Pavement Joint Adhesive	433	Lf
410.22	Tack Coat (Subsidiary)	1215	Sy
417A	Cold Planing of Butt Joints	7	Sy
604.45	Adjust CB or MH Covers	2	Lf
604.72	Provide and Install New CB Grate and Frame	2	Ea
618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.006	U
632.3112	12" Thermoplastic Line	20	Lf
641	Loam & Seed	3	Cy
692	Mobilization	0.006	U

Van Buren Ave (Harrison to McKinley) (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11W	1.5" of 3/8" Machine Pave	160	Tons
403.12	Hand Method Pave	14	Tons
403.13S	Pavement Patching <30 Square yards (50 gyr)	34	Sy
403.6	Pavement Joint Adhesive	699	Lf
410.22	Tack Coat (Subsidiary)	164	Sy

417A	Cold Planing of Butt Joints	61	Sy
604.45	Adjust CB or MH Covers	5	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	1	Ea
611.90001	Adjusting Water Gates	1	Ea
618.7	Flaggers	32	Hr
619	Maintenance of Traffic	0.02	Ls
632.3112	12" Thermoplastic Line	24	Lf
641	Loam & Seed	6	Cy
692	Mobilization	0.02	U

Arthur Rd (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11W	1.5" of 3/8" Machine Pave	181	Tons
403.12	Hand Method Pave	12	Tons
403.6	Pavement Joint Adhesive	766	Lf
410.22	Tack Coat (Subsidiary)	2248	Sy
417A	Cold Planing of Butt Joints	81	Sy
604.45	Adjust CB or MH Covers	7	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	2	Ea
604.6124D	Provide and Install New 24" Hinged DMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	4	Ea
618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.015	Ls
632.3112	12" Thermoplastic Line	16	Lf
641	Loam & Seed	8	Cy
692	Mobilization	0.015	U

Taylor Ln (Cleveland to McKinley) (1.5" Overlay)

Item #	Description	Quantity	Unit
403.11W	1.5" of 3/8" Machine Pave	217	Tons
403.12	Hand Method Pave	36	Tons
403.13S	Pavement Patching <30 Square yards (50 gyr)	27	Sy
403.6	Pavement Joint Adhesive	1000	Lf
410.22	Tack Coat (Subsidiary)	2956	Sy
417A	Cold Planing of Butt Joints	163	Sy
604.45	Adjust CB or MH Covers	8	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	3	Ea
604.6124D	Provide and Install New 24" Hinged DMH Frame and Cover	3	Ea
604.72	Provide and Install New CB Grate and Frame	2	Ea
611.90001	Adjusting Water Gates	2	Ea

618.7	Flaggers	16	Hr
619	Maintenance of Traffic	0.021	U
641	Loam & Seed	9	Cy
692	Mobilization	0.021	U

Blue Heron Dr (Reclaim)

Item #	Description	Quantity	Unit
203.1	Common Excavation (Extra Reclaim)	573	Cy
203.1	Common Excavation (Removal of Ex. Bituminous Sidewalk)	23	Cy
214	Fine Grading	4793	Sy
304.3	Crushed Gravel for Sidewalk Prep	23	Cy
306.208	Reclaim and Rehandle	4793	Sy
306.36	Stone for RSB	290	Tons
403.11B	2.5" of 3/4 " Fine Binder Machine Pave (50 gyr)	683	Tons
403.11W	1.5" of 3/8" Machine Pave	410	Tons
403.12	Hand Method Pave	132	Tons
403.6	Pavement Joint Adhesive	2257	Lf
410.22	Tack Coat (Subsidiary)	4793	Sy
604.45	Adjust CB or MH Covers	2	Lf
604.72	Provide and Install New CB Grate and Frame	2	Ea
609.5	Reset Curb	1928	LF
618.7	Flaggers	112	Hr
619	Maintenance of Traffic	0.12	U
628.2	Saw Bituminous Pavement	662	Lf
632.3112	12" Thermoplastic Line	16	Lf
641	Loam & Seed	30	Cy
692	Mobilization	0.12	U

Shearwater Dr (Reclaim)

Item #	Description	Quantity	Unit
203.1	Common Excavation (Extra Reclaim)	375	Cy
203.1	Common Excavation (Removal of Ex. Bituminous Sidewalk)	24	Cy
214	Fine Grading	3376	Sy
304.3	Crushed Gravel for Sidewalk Prep	24	Cy
306.208	Reclaim and Rehandle	3376	Sy
306.36	Stone for RSB	190	Tons
403.11B	2.5" of 3/4" Fine Binder Machine Pave (50 gyr)	356	Tons
403.11W	1.5" of 3/8" Machine Pave	273	Tons
403.12	Hand Method Pave	90	Tons
403.6	Pavement Joint Adhesive	1267	Lf
410.22	Tack Coat (Subsidiary)	3376	Sy

604.45	Adjust CB or MH Covers	11	Lf
604.6130S	Provide and Install New 30" Hinged SMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	3	Ea
609.5	Reset Curb	1247	LF
611.90001	Adjusting Water Gates	3	Ea
618.7	Flaggers	64	Hr
619	Maintenance of Traffic	0.08	U
628.2	Saw Bituminous Pavement	441	Lf
632.0104	4" Painted Lane Striping	1460	Lf
632.3112	12" Thermoplastic Line	229	Lf
641	Loam & Seed	15	Cy
692	Mobilization	0.08	U

Grafton Rd (NH RT 33 to Sherburne Rd) (2.5" Shim & Overlay)

Item #	Description	Quantity	Unit
304.32	Crushed Gravel or Reclaim for Shoulders	77	Cy
403.11W	2.5" 1/2" (50gyr) Machine Pave	2000	Tons
403.11H	Machine Pave 1/2" (50gyr) High Strength	850	Tons
403.12	Hand Method Pave	10	Tons
403.6	Pavement Joint Adhesive	3806	Lf
410.22	Tack Coat (Subsidiary)	15097	Sy
413	Crack Sealant	6000	Lb
417A	Cold Planing of Butt Joints	1157	Sy
604.45	Adjust CB or MH Covers	4	Lf
611.90001	Adjusting Water Gates	4	Ea
616.650	6' x 50' Traffic Signal Loop	2	Ea
618.7	Flaggers	160	Hr
619	Maintenance of Traffic	0.14	U
632.0104	4" Painted Lane Striping	11811	Lf
632.3112	12" Thermoplastic Line	350	Lf
632.3118	18" Thermoplastic Line	34	Lf
632.32	Thermoplastic Symbols	240	Sf
692	Mobilization	0.14	U

Morning St (Reclaim)

Item #	Description	Quantity	Unit
203.1	Common Excavation (Extra Reclaim)	167	Cy
214	Fine Grading	1502	Sy
306.208	Reclaim and Rehandle	1502	Sy
306.36	Stone for RSB	85	Tons
403.11B	2.5" 3/4" fine binder Machine Pave (50 gyr)	195	Tons

403.11W	1.5" of 3/8" Machine Pave	117	Tons
403.12	Hand Method Pave	60	Tons
403.6	Pavement Joint Adhesive	696	Lf
410.22	Tack Coat (Subsidiary)	1502	Sy
604.45	Adjust CB or MH Covers	11	Lf
604.6124S	Provide and Install New 24" Hinged SMH Frame and Cover	1	Ea
604.6130S	Provide and Install New 30" Hinged SMH Frame and Cover	1	Ea
604.72	Provide and Install New CB Grate and Frame	4	Ea
611.90001	Adjusting Water Gates	4	Ea
618.7	Flaggers	64	Hr
619	Maintenance of Traffic	0.03	U
628.2	Saw Bituminous Pavement	400	Lf
632.3112	12" Thermoplastic Line	70	Lf
641	Loam & Seed	5	Cy
692	Mobilization	0.03	U

Nathaniel Dr (1.5" Overlay)

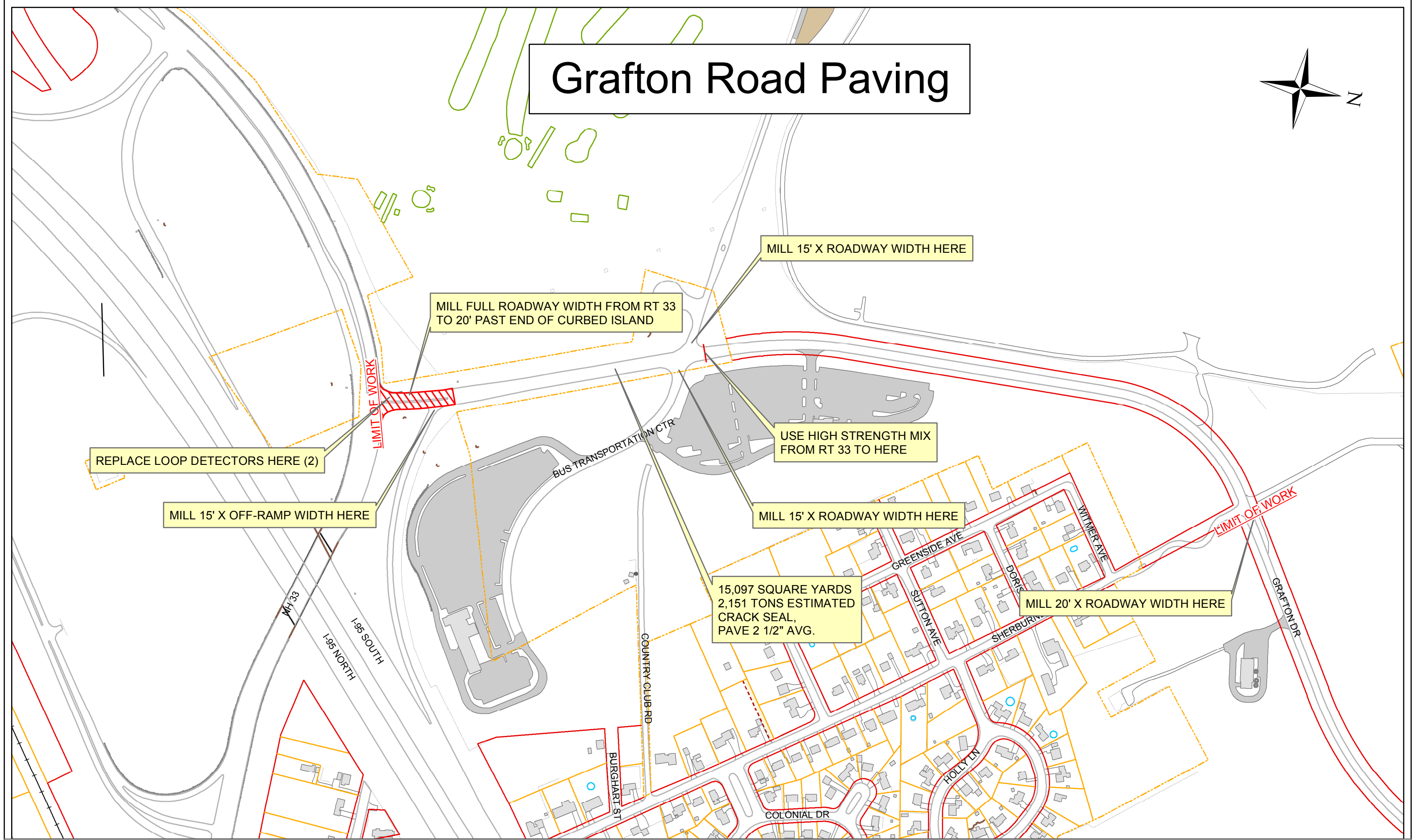
Item #	Description	Quantity	Unit
403.11B	1.5" of 3/8" Machine Pave	552	Tons
403.12	Hand Method Pave	22	Tons
403.6	Pavement Joint Adhesive	1944	Lf
410.22	Tack Coat (Subsidiary)	6710	Sy
417A	Cold Planing of Butt Joints	231	Sy
604.45	Adjust CB or MH Covers	30	Lf
604.6130S	Provide and Install New 30" Hinged SMH Frame and Cover	1	Ea
604.6130D	Provide and Install New 30" Hinged DMH Frame and Cover	1	Ea
611.90001	Adjusting Water Gates	3	Ea
618.7	Flaggers	32	Hr
619	Maintenance of Traffic	0.04	U
632.3112	12" Thermoplastic Line	32	Lf
692	Mobilization	0.04	U

State St (Cabot to Middle) (1.5" Mill & Overlay)

Item #	Description	Quantity	Unit
403.11B	1.5" of 3/8" Machine Pave	532	Tons
403.12	Hand Method Pave	27	Tons
403.6	Pavement Joint Adhesive	1600	Lf
410.22	Tack Coat (Subsidiary)	6222	Sy
413	Crack Sealant	3000	Lb
417	Cold Planing	2489	Sy
604.45	Adjust CB or MH Covers	10	Lf

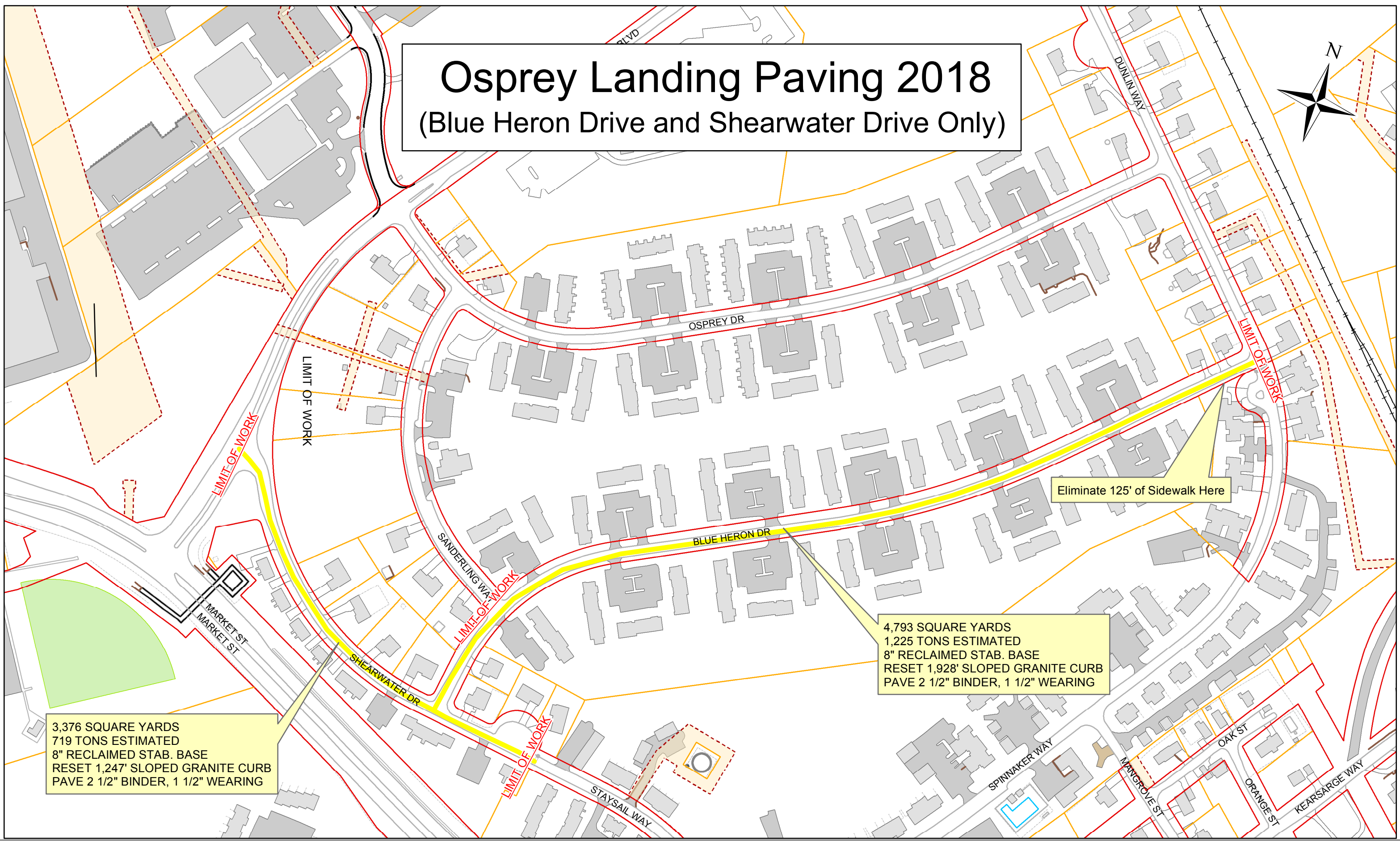
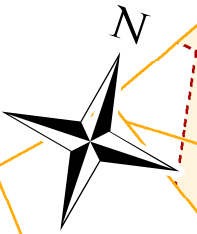
604.6130S	Provide and Install New 30" Hinged SMH Frame and Cover	6	Ea
604.72	Provide and Install New CB Grate and Frame	4	Ea
611.90001	Adjusting Water Gates	8	Ea
618.7	Flaggers	160	Hr
619	Maintenance of Traffic	0.061	U
632.0104	4" Painted Lane Striping	3200	Lf
632.3112	12" Thermoplastic Line	950	Lf
692	Mobilization	0.061	U

Grafton Road Paving



Osprey Landing Paving 2018

(Blue Heron Drive and Shearwater Drive Only)



3,376 SQUARE YARDS
 719 TONS ESTIMATED
 8" RECLAIMED STAB. BASE
 RESET 1,247' SLOPED GRANITE CURB
 PAVE 2 1/2" BINDER, 1 1/2" WEARING

4,793 SQUARE YARDS
 1,225 TONS ESTIMATED
 8" RECLAIMED STAB. BASE
 RESET 1,928' SLOPED GRANITE CURB
 PAVE 2 1/2" BINDER, 1 1/2" WEARING

Eliminate 125' of Sidewalk Here