June 5, 2009
City of Portsmouth, New Hampshire
Public Works Department
Bid #44-09
Addendum #1

Raleigh Way Streetscape Improvements

Phase II & III

Bid #44-09

To the attention of all vendors submitting bids for Bid #44-09 Raleigh Way Streetscape Improvements Phase II & III.

The attached Section 604 replaces the original Section 604 of the technical specifications of Bid #44-09 Raleigh Way Streetscape Improvements Phase II & III.

The attached bid proposal pages replace the original proposal pages of Bid #44-09 Raleigh Way Streetscape Improvements Phase II & III.

Please acknowledge this addendum within your proposal. Failure to do so may cause a bidder to be disqualified.

SECTION 604

MANHOLES AND CATCH BASINS

The provisions of Section 604 of the Standard Specifications shall apply with the following additions and modifications:

604.3 Construction Requirements. Concrete Blocks shall not be used in any way in the construction or alteration of manholes or catch basins.

All manhole bases, barrel sections and top sections shall be marked, by the manufacturer, with the appropriate manhole station (and offset if applicable).

It is emphasized to the Contractor that drainage construction under this contract shall be coordinated with existing facilities so that continuous service and handling of existing flows is accomplished.

The outside surface of any masonry work for catch basins and manholes shall be plastered with mortar from 1/4 inch to 3/8 inch thick. The masonry shall be properly wetted before the plaster is applied. The plaster shall be carefully spread and toweled so that all cracks are thoroughly worked out. After hardening, the plaster shall be carefully checked by being tapped for bond and soundness.

All brick masonry surfaces with mortar shall be waterproofed with one coat of DEHYDRATINE 6 TROWEL MASTIC, DEHYDRATINE 10 SEMI-MASTIC or approved equal.

604.4 Method of Measurement. Under this Subsection the following sections shall be amended as follows:

- Complete structures. Each catch basin and manhole will be measured per each complete.
- Castings or other appurtenances installed as shown on the plans or as required shall not be measured for payment.

604.5 Basis of Payment. The section shall be amended by adding the following:

The cost of furnishing and installing reinforced steel concrete stubs, castings and other appurtenances shall be considered as incidental to the structure and no separate payment will be made therefore.

The cost of excavation and backfill of all catch basins or manholes, either new, abandoned, or removed and/or replaced shall be included in the cost of the specific work for each type of structure.

The cost of resetting curb inlet stones shall be considered incidental to the cost of adjusting catch basins to grade and no separate payments will be made. The cost of delivering inlet stones and/or castings to approved sites shall be considered as incidental to the contract items involved.

The cost of maintaining flows in existing sewer lines and manholes and any maintenance and cleaning of said sewers that may be required as a result of new manhole installations shall be incidental to the related pay item and no separate payment for this work will be made. Sewer manhole construction shall also conform to Section 612.

The cost of connecting existing pipes to the structure (catch basin or manhole) shall be considered incidental to the new structure and no separate payment will be made.

The Cost of removing existing structures and pipes shall be incidental to catch basin, manhole, or pipe installation.

Polyethylene Liner: This work shall consist of the use of a pre-constructed polyethylene catch basin liner to be installed as part of a new basin installation.
Eliminator Oil & Floating Debris Trap for Catch Basins: These shall be installed at each outlet pipe, one per catch basin.

Materials:

The Liners shall be EJ Prescott part number 68896 or approved equal.
Snorkels shall be The Eliminator as manufactured by Ground Water Rescue, Inc.

Construction Requirements:

The liners will be placed on the top of the new structure, the frame for the basin is then placed on top of the liner and then the edges of the liner are trimmed to the edges of the frame. The frame can then be cemented normally. The snorkels shall be installed as per manufacturer's recommendations

Method of Measurement:

The liners will not be measured for payment but shall be included in the price for Catch Basins. Snorkels will not be measured for payment but shall be included in the price for Catch Basins

Basis of Payment:

The liners and snorkels shall be considered subsidiary to 604.12 Catch Basins and no separate payment shall be made.

LEAKAGE TESTS

General:

Perform vacuum tests on all manholes.
Exfiltration tests on manholes shall be performed in case of vacuum test failure or may be submitted as a substitution with approval by the Engineer.
The Engineer shall observe all tests.
Repairs to manholes found to leak by any test method shall be performed both inside and outside the structure by a method approved by the Engineer.

Preparation:

After manholes have been assembled in place, fill and point all lifting holes with non-shrink grout. Do not place non-shrink grout between precast sections until after successfully testing the structure.
All manholes shall be tested prior to backfilling to allow for compression of the mastic joint sealant.
Test all manholes with pipes and or stubs installed. Testing with through pipes to be removed and replaces is not acceptable.
Manholes in which the pipe to manhole connection is disassembled after testing shall be retested at the Contractors expense.
Make the tests prior to placing the shelves and inverts and before filling and pointing the horizontal joints below the 6-foot depth line.
Suitably plug all pipes and other openings into the manholes.

Test Procedure: Vacuum

Testing Equipment:

Use only an approved testing machine.
National Pollution Control, Inc.
Or equal.
The equipment shall be in good working condition. Gauges shall be suitably sized such that the test vacuum pressure is at the mid-point of the span of the gauge. The equipment shall not have any abnormalities.
The equipment shall be run only by trained personnel that are familiar with the equipment and testing procedure.

Securely brace all plugs.

Check cone section to insure good seal with the testing equipment bladder.

Testing Requirements:

Bring test vacuum to 10 in. Hg gauge.

Test Duration:

Manholes 0'-10' - 2 minutes
Manholes 10'-15'- 2.5 minutes
Manholes 15'-25'- 3 minutes

Allowable leakage is 1" Hg or less over the test duration time given.

If pressure drop exceeds 1" Hg in the required time, the manhole shall be repaired and retested.

If the manhole fails after being repaired, the manhole shall be "Water Exfiltration Tested" according to the criteria of the specification.

When a leak is identified, repair the area from both inside and out by a method approved by the Engineer. Methods to be considered include parging with hydraulic cement and pressure application of polyurethane grout.

Test Procedure: Water Exfiltration Test

Lower groundwater below the bottom of the manhole for the duration of the tests.

Fill the manhole with water to the top of the cone section.

If the excavation has not been backfilled and observation indicates no visible leakage (no water visibly moving down the surface of the manhole); the manhole may be considered to be satisfactorily watertight.

If the test is unsatisfactory, in the opinion of the Engineer, or if the manhole has been backfilled, the test shall be extended.

A period of time may be permitted, if the Contractor so wishes, to allow for absorption.

At the end of the absorption time period, refill the manhole to the top of the cone, if necessary, and begin measuring an 8-hour test period.

At the end of the test period, refill the manhole to the top of the cone and measure the volume of water added. This amount shall be extrapolated to a 24-hour rate and the leakage shall be determined on the basis of depth. The leakage for each manhole shall not exceed 1 gallon per vertical foot for a 24-hour period.

If the test fails this requirement, but the leakage does not exceed 3 gallons per vertical foot per day, repairs by approved methods may be made, as directed or approved by the Engineer, to bring the leakage within the allowable rate of 1 gallon per vertical foot per day.

Leakage due to a defective section or joint exceeding the 3-gallon per vertical foot per day shall be cause for the rejection of the manhole.

Uncover all rejected manholes as necessary and disassemble, reconstruct or replace them as directed by the Engineer at no additional cost to the Owner.

All manhole repairs shall be made inside and out.

Retest repaired or replaced manhole and, if satisfactory, fill and finish interior joints.

Repairs:

All pickup holes shall be filled with non-shrink grout and coated with 2 coats of waterproofing.

Repair all waterproofing that have been damaged in transit or handling to the satisfaction of the Engineer.

Backfilling:

Manhole testing shall be conducted before backfilling around the manhole. All Repairs shall be made inside and outside.

No adjustment in the leakage allowance will be made for unknown causes such as leaking plugs, absorption, etc. It shall be assumed that all loss of water during the test is a result of leaks through the joints or through the concrete.

If the manhole test fails, lower the water table and carry out the exfiltration test specified above at no additional cost to the Owner.

Accident Prevention: Following the satisfactory completion of the leakage test, place the frame and cover on the top, or provide other means of preventing accidental entry by unauthorized persons, children, animals, etc., until ready to make final adjustment to grade.

Clean up:

Upon completion, clean all structures of silt, debris, and other matter.
Keep all manholes clean until final acceptance of the work.

END OF SECTION

Payment will be made under:

Pay Item		**Pay Unit**
604.12	Catch Basins- Type B (4’ Diameter) includes polyethylene liner And Eliminator Snorkel	Each
604.314	Sewer Manhole (4’ Diameter)	Each
604.324	Drainage Manhole (4’ Diameter)	Each
604.55	Adjust Existing MH or CB Cover to grade	Each

PROPOSAL FORM

THIS PROJECT SHALL BE BID BY UNIT PRICES:

ITEM NO.	ESTIMATED QUANTITY	UNIT	DESCRIPTION	UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
201.21	15	EA	Small Tree Removal		$	$
201.22	7	EA	Large Tree Removal		$	$
201.4	1	EA	Remove Stump		$	$
202.41	7	LF	Removal Of Existing Pipe, 0 - 24" Diameter		$	$
203.1	2,191	CY	Common Excavation		$	$
203.2	360	CY	Rock Excavation		$	$
206.2	415	CY	Rock Structure Excavation		$	$
214.01	1	U	Fine Grading		$	$
304.2	1,085	CY	Gravel		$	$
304.3	700	CY	Crushed Gravel		$	$
403.11	575	T	Hot Bituminous Pavement (Machine Method)		$	$
403.12	90	T	Hot Bituminous Pavement (Hand Method)		$	$
403.99	20	T	Temporary Bituminous Pavement		$	$
520.2	70	CY	Concrete Class B		$	$
603.81004	196	LF	4" Plastic Pipe - PVC		$	$
603.81006	34	LF	6" Plastic Pipe – PVC		$	$
603.82212	220	LF	12” Smooth Interior HDPE Drain Pipe		$	$
604.12	3	EA	Catch Basin Type B - 4' Diameter (includes polyethylene liner & Snorkel		$	$
604.314	4	EA	Sewer Manhole 4' Diameter		$	$
604.324	1	EA	Drainage Manhole 4' Diameter		$	$
604.529	1	EA	Core Existing Manhole		$	$
607.9	16	LF	Resetting Railing & Fence		$	$

607.902	70	LF	Reset Wood Picket Fence at 86 Raleigh Way		$		$	
607.903	94	LF	Reset Wood/Chainlink Fence at 155/157 Raleigh Way		$		$	
608.24	294	SY	4" Fiber Reinforced Concrete Sidewalk		$		$	
608.26	32	SY	6" Reinforced Concrete Sidewalk		$		$	
608.52	4	EA	Detectable Warning Panels		$		$	
608.908	35	SF	Reconstruct Brick Walkway @ #86 Raleigh Way		$		$	
608.909	39	SF	Reconstruct Gravel Walkway @ #112/114 Raleigh Way		$		$	
608.910	42	SF	Reconstruct Conc Walkway @ #122/124 Raleigh Way		$		$	
608.911	7	SF	Reconstruct Steps @ #62 Raleigh Way		$		$	
608.912	73	SF	Reconstruct Driveway Pavers @ #600 Kearsarge Way		$		$	
609.01	1,110	LF	Straight Granite Curb		$		$	
609.02	20	LF	Curved Granite Curb		$		$	
609.5	105	LF	Reset Granite Curb		$		$	
611.05208	823	LF	8" Cement-Lined Ductile Iron Water Pipe CL. 52		$		$	
611.50003	670	LF	3/4" Service Connection		$		$	
611.52007	34	EA	¾" Curb Stop		$		$	
611.71008	2	EA	8" Gate Valve		$		$	
611.8001	1	LS	As-Built Plans		$		$	
611.811	1	EA	Relocate Hydrant		$		$	
611.901	1	EA	8" X 8" Tee – Ductile Iron Pipe		$		$	
611.904	1	EA	8" X 8" Cross – Ductile Iron Pipe		$		$	
612.108	548	LF	8" PVC Sewer Pipe		$		$	
612.5	597	LF	6" PVC Sewer Lateral		$		$	
614.522	8	EA	Molded Pull Box 13" X 24"		$		$	

614.7214	735	LF	2” PVC Plastic Conduit, Schedule 40		$		$	
615.03	4	SF	Traffic Sign Type C (T)		$		$	
628.2	225	LF	Sawed Bituminous Pavement		$		$	
632.0104	900	LF	Retroreflective Paint Pave. Marking, 4” Line		$		$	
632.3112	275	LF	Retroreflect. Thermoplas. Pave. Marking, 12” Line		$		$	
641	110	CY	Loam		$		$	
645.7	1	LS	Stormwater Pollution Prevention Plan (SWPPP)		$		$	
645.71	70	HR	Monitoring SWPPP And Erosion Control		$		$	
646.31	603	SY	Turf Establishment With Mulch And Tackifiers		$		$	
652.55	4	EA	Platanus Acerifolia London Planetree		$		$	
652.96	4	EA	Ulmus Americana “Princeton” Elm		$		$	
652.97	3	EA	Zelkova Serrata ‘Green Vase’		$		$	
653.87	4	EA	Pyrus Calleryana ‘Arist’ Aristocrat Flowering Pear		$		$	
692	1	LS	Mobilization		$		$	
699	$	$	Misc. Temporary Erosion & Sediment Control	N/A	$	N/A	$	3,000
618.6	90	MH	Uniformed Police Officer	Forty Five Dollars and Seventy Five Cents	$	45.75	$	4,117.50
619.1	1	LS	Maintenance of Traffic		$		$	

Total Amount of Base Bid of Items compiled by the Bidder using the estimated quantities listed above.

In Figures $_____

In Words $_____

Bid Alternative 1

ITEM NO.	ESTIMATED QUANTITY	UNIT	DESCRIPTION	UNIT PRICE IN WORDS	UNIT PRICE IN FIGURES	ITEM TOTAL IN FIGURES
607.903	94	LF	Reset Chain Link Fence @ #155/157 Raleigh Way	_____	$ _____	$ _____

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:_____
Print Name

By:_____
Signature

Title:_____

_____
Business Address

_____
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.

Bid prices shall remain firm for 60 days.

End of Addendum #1