

THE CITY OF WALTHAM
MASSACHUSETTS

PURCHASING DEPARTMENT

Lexington Street Sidewalk Improvements, 2024

ADDENDUM NO. 1

March 1st, 2024

CHANGES, CORRECTIONS AND CLARIFICATIONS

The attention of bidders submitting proposals for the above subject project is called to the following addendum to the specifications. The items set forth herein, whether of omission, addition, substitution, or clarification are all to be included in and form a part of the proposal submitted.

THE NUMBER OF THIS ADDENDUM (NO. 1) MUST BE ACKNOWLEDGED ON THE BID FORM, SECTION 00300-3.

ITEM 1: DELETE AND REPLACE

Please **DELETE** the following sections and **REPLACE** with the attached revised sections:

- Table of Contents
- Section 00300 – Bid Form
- Section 01025 – Measurement & Payment
- Sheets 5, 6, & 9 of the Contract Drawings

ITEM 2: ADD ATTACHMENTS

ADD Section 00400 – Compliance Forms

ADD Section 02990 - Guardrail

LEXINGTON STREET SIDEWALKS IMPROVEMENTS PROJECT

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LEXINGTON STREET SIDEWALKS IMPROVEMENTS PROJECT

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CONTRACT DRAWINGS

Plans Showing Sidewalk Improvements Along Lexington Street, City of Waltham, Massachusetts
Dated January 2024. Sheets 1 through 11. Created by City of Waltham Engineering Department

Note: Sheets 5, 6, & 9 revised and re-issued in Addendum #1

SECTION 00300

BID FORM

LEXINGTON STREET SIDEWALKS IMPROVEMENTS PROJECT

ADDENDUM #1

PART 1 GENERAL

1.01 SCHEDULE OF BID ITEMS

1.02 DEFINITIONS OF TERMS AND ABBREVIATIONS USED IN THE BID

PART 2 BID

PART 1 GENERAL

1.01 SCHEDULE OF BID ITEMS

- A. The following Schedule of Bid Items shall be completed in ink or typewritten. All item prices must be entered in both words and figures and extended by the Bidder. In case there is a discrepancy between the item prices shown in words and figures, the amount shown in words shall govern.
- B. Where the Schedule of Items consists of more than one (1) item, the total bid price for the Contract, calculated as above and entered at the end of the schedule, is not a part of the Bid, but is to be used solely for the comparison of bids to determine the apparent low bidder. The Low Bidder will be determined based on the sum of the individual bid items.
- C. Failure to submit a formal Bid in accordance with the requirements of the INSTRUCTIONS AND INFORMATION FOR BIDDERS will be considered sufficient grounds for rejection of the entire Bid Proposal.
- D. Bidders must fill in a price for all items in the bid except for items Not In Contract (NIC).
- E. Project Award: The project will be awarded to the lowest bidder. The lowest bidder is defined as the bidder with the lowest price summing the Bid including chosen alternates and qualified by the City.

1.02

DEFINITIONS OF TERMS AND ABBREVIATIONS USED IN THE BID

- A. Where any of the following abbreviations are used in the Bid, they shall have the meaning set forth opposite each. Periods may or may not be used in abbreviations.

Alt.	Alternate
CLDI	Cement Lined Ductile Iron
CMP	Corrugated Metal Pipe
CPP	Corrugated Polyethylene Pipe
C.Y.	Cubic Yard
D.I.	Ductile Iron
Dia.	Diameter
EA.	Each
F.A.	Fees Allowance
HMA	Hot Mix Asphalt
lbs.	Pounds
L.F.	Linear Feet
L.S.	Lump Sum
Min.	Minimum
MFBM	Thousand Board Feet
M.H.	Man-hour
N/A	Not Applicable
NIC	Not In Contract
PE	Polyethylene
psi	Pounds per Square inch
PVC	Polyvinylchloride
R.C.P.	Reinforced Concrete Pipe
R.O.W.	Right of Way
SDR	Standard Dimensional Ratio
S.F.	Square Foot
S.Y.	Square Yard
V.C.	Vitrified Clay
V.F.	Vertical Feet
w/	with
w/o	without

BID FORM FOR
CITY OF WALTHAM, MASSACHUSETTS
LEXINGTON STREET SIDEWALKS IMPROVEMENTS PROJECT

The undersigned Bidder declares that the only parties interested in this Bid as principals are as stated; that the bid is made without collusion with any other person, firm, or corporation; that no officer or agent is directly or indirectly interested in this Bid; that the Bidder has carefully examined all Contract Documents and Contract Drawings listed within the Table of Contents.

The undersigned Bidder understands that the information relative to existing structures, apparent and latent conditions and natural phenomena as furnished to them on the Contract Drawings or in the Contract Documents or by the Owner or the Engineer, carries no guarantee expressed or implied as to its completeness or accuracy and the Bidder has made all due allowance therefore. The quantities of work tabulated in this Bid and indicated on the drawings or in the specifications are only approximate and are subject to increase or decrease.

The undersigned Bidder agrees that the amount of the bid security deposited with this Bid fairly and reasonably represents the amount of damages the Owner will suffer due to his failure to fulfill his agreements as hereinafter set forth and he further understands that should the Bidder so fail, the Owner shall have the right to retain as liquidated damages for the entire amount of the bid security.

In submitting this Bid the undersigned Bidder agrees:

- A. To hold this Bid open for one hundred and twenty (120) calendar days.
- B. To accept the provisions regarding disposition of security.
- C. To enter into and execute a contract, if awarded on the basis of this Bid, and to furnish guarantee bonds.
- D. To accomplish the work in accordance with the Contract Documents.
- E. To complete the work by the time stipulated in the agreement.

The undersigned further understands and agrees that they are to furnish and provide for the respective bid price all the necessary material, machinery, tools, labor, services, and other items of whatever nature, and to do and perform all the work necessary under the aforesaid conditions, to complete the above-mentioned project in accordance with the plans and specifications for the project.

The undersigned Bidder further understands that the Documents of the Contract for which his Bid is being submitted establish that liquidated damages in the amount of \$500.00 per calendar day shall be applied for breach of Contract in accordance in with the provisions of AGREEMENT.

The undersigned Bidder acknowledges receipt of Addenda numbered_____

The undersigned Bidders also agree as follows:

- A. To do any extra work, not covered by the Contract, which may be ordered by the Engineer, and to accept as full compensation therefore such prices as may be agreed upon in writing by the Engineer and the Contractor in accordance with SECTION 00700 - GENERAL CONDITIONS.
- B. Within ten (10) days from the date of the "Notice of Award", to execute the Contract and to furnish the Owner a satisfactory Performance Bond and Labor and Material Payment Bond as set forth in INSTRUCTIONS AND INFORMATION FOR BIDDERS.
- C. To begin work at the site on the day designated in the "Notice to Proceed" and to prosecute said work in such a manner that the entire project shall be completed within the time specified in the AGREEMENT.

Accompanying this Bid is a certified bid bond or check, for 5% of the bid, in the amount of \$_____ (Bidder to fill in) payable to the Owner to secure said Owner against the failure of the undersigned to execute the Contract and furnished satisfactory bonds under the Conditions and within the time specified in this Bid.

BRIEF DESCRIPTION

BASE BID

ITEM NO.	BID PRICE ENTERED IN BOTH WORDS AND FIGURES (UNIT PRICE)	ESTIMATED QUANTITY	TOTAL PRICE (UNIT PRICE X QUANTITY)
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2. DRAINAGE SYSTEM APURTENANCES AND FITTINGS

2A.	Furnish and Install 4' Dia. Standard Precast Catch Basin, any Depth, As specified, per Each _____dollars and _____cents (\$ _____)	2	EA.	\$ _____
2B.	Furnish and Install Catch Basin Frame and grate, As specified, each _____dollars and _____cents (\$ _____)	2	EA.	\$ _____
2C.	Furnish and Install 4' Dia. Standard Precast Drain Manhole, any Depth, As specified, per Each _____dollars and _____cents (\$ _____)	1	EA.	\$ _____
2D.	Furnish and Install Drainage Manhole, Frame and cover, As specified, Each _____dollars and _____cents (\$ _____)	1	EA.	\$ _____
2E.	Furnish and Install 12" Dia. Ductile Iron Drainpipe and Fittings, Class 56, Zinc Coated, Cement Lined (CLDI), all depths of cover, per Linear Foot _____dollars and _____cents (\$ _____)	20	L.F.	\$ _____

Subtotal for Page _____
Base Bid

BRIEF DESCRIPTION

BASE BID

ITEM NO.	BID PRICE ENTERED IN BOTH WORDS AND FIGURES (UNIT PRICE)	ESTIMATED QUANTITY	TOTAL PRICE (UNIT PRICE X QUANTITY)
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2. DRAINAGE SYSTEM APURTENANCES AND FITTINGS CONT.

2F.	Core Existing SMH or DMH Each _____dollars and _____cents (\$ _____)	1 EA.	\$ _____
2G.	Remodel Existing Manhole or Catch Basin Structure Per Vertical Foot _____dollars and _____cents (\$ _____)	30* V.F.	\$ _____

3. EARTHWORK

3A.	General, Unclassified, and Test Pit Excavation, per Cubic Yard _____dollars and _____cents (\$ _____)	800* C.Y.	\$ _____
3B.	Rock Excavation, Disposal and Backfill, per Cubic Yard _____dollars and _____cents (\$ _____)	50* C.Y.	\$ _____
3C.	Gravel Borrow Fill and /or Gravel Borrow Refill of Unsuitable Material, Per Cubic Yard. _____dollars and _____cents (\$ _____)	600* C.Y.	\$ _____

*Indeterminate Quantity. These quantities are not guaranteed. Payment will be based upon actual quantities constructed.

Subtotal for Page _____
Base Bid

BRIEF DESCRIPTION

BASE BID

ITEM NO.	BID PRICE ENTERED IN BOTH WORDS AND FIGURES (UNIT PRICE)	ESTIMATED QUANTITY	TOTAL PRICE (UNIT PRICE X QUANTITY)
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4. ROADWAY (PAVEMENT)

4A.	Furnish and Place Bituminous Concrete Pavement Temporary Trench Patch, 3" minimum depth, per Linear Foot _____dollars and _____cents (\$ _____)	40 L.F.	\$ _____
4B.	Furnish and Place Bituminous Concrete Pavement Permanent Trench Patch, 4.5" minimum depth, per Linear Foot _____dollars and _____cents (\$ _____)	40 L.F.	\$ _____
4C.	Furnish and Place Bituminous Concrete Pavement (Hand Method) for Test Pits and Miscellaneous Areas, per Ton _____dollars and _____cents (\$ _____)	150* TON	\$ _____
4D.	Remove and Reset Granite Curb, all lengths of straight, curved, Inlet, return stones, transition curb, and sloped per linear foot, _____dollars and _____cents (\$ _____)	5,200 L.F.	\$ _____
4E.	Furnish and Install Granite Curb, all lengths of straight, curved And transition curb, per linear foot, _____dollars and _____cents (\$ _____)	500* L.F.	\$ _____

*Indeterminate Quantity. These quantities are not guaranteed. Payment will be based upon actual quantities constructed.

Subtotal for Page \$ _____
Base Bid

BRIEF DESCRIPTION

BASE BID

ITEM NO.	BID PRICE ENTERED IN BOTH WORDS AND FIGURES (UNIT PRICE)	ESTIMATED QUANTITY	TOTAL PRICE (UNIT PRICE X QUANTITY)
4. ROADWAY (PAVEMENT)) CONT.			
4F.	Furnish and Install Granite Curb Return Corners 2 foot radius, per Each, _____dollars and _____cents (\$ _____)	10* EA.	\$ _____
4G.	Furnish and Install Granite Inlet Stones for Catch Basins, per Each, _____dollars and _____cents (\$ _____)	10* EA.	\$ _____
4H.	Bit. Concrete Sidewalk, All widths, 3" min. depth, per square yard _____dollars and _____cents (\$ _____)	100* S.Y.	\$ _____
4I.	Cement Concrete Sidewalk, All widths, 4" min. depth, per square yard _____dollars and _____cents (\$ _____)	2,900 S.Y.	\$ _____
4J.	Cement Concrete Driveway, All widths, 6" min. depth, per square yard _____dollars and _____cents (\$ _____)	950 S.Y.	\$ _____

*Indeterminate Quantity. These quantities are not guaranteed. Payment will be based upon actual quantities constructed.

Subtotal for Page _____
Base Bid

BRIEF DESCRIPTION

BASE BID

ITEM NO.	BID PRICE ENTERED IN BOTH WORDS AND FIGURES (UNIT PRICE)	ESTIMATED QUANTITY	TOTAL PRICE (UNIT PRICE X QUANTITY)
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4. ROADWAY (PAVEMENT)) CONT.

4K.	Cement Concrete Wheelchair Ramp, All widths, 6" min. depth, per square yard _____ dollars and _____ cents (\$ _____)	140 S.Y.	\$ _____
4L.	4" Permanent pavement marking, All colors, per linear foot _____ dollars and _____ cents (\$ _____)	500 L.F.	\$ _____
4M.	12" Permanent pavement marking, All colors, per linear foot _____ dollars and _____ cents (\$ _____)	40 L.F.	\$ _____
4N.	Single Face Wooden Guardrail, all lengths and transitions, per linear foot _____ dollars and _____ cents (\$ _____)	325 L.F.	\$ _____

5. INCIDENTAL WORK

5A.	Uniformed Police for Traffic Control, Per Man-hour _____ Sixty _____ dollars and _____ No _____ cents (\$ _____ 60.00 _____)	1,700**M.H.	\$ _____ 102,000 _____
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**NOTE: Police Detail invoices will be paid by Contractor and reimbursed by the City of Waltham up to \$102,000. Contractor shall coordinate detail Assignments.

5B.	Furnish and Install Silt Sack, With Overflow, per Each _____ dollars and _____ cents (\$ _____)	30 EA.	\$ _____
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Subtotal for Page _____
Base Bid

BRIEF DESCRIPTION

BASE BID

ITEM NO.	BID PRICE ENTERED IN BOTH WORDS AND FIGURES (UNIT PRICE)	ESTIMATED QUANTITY	TOTAL PRICE (UNIT PRICE X QUANTITY)
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6. LUMP SUM ITEMS CONT.

6B.	Miscellaneous Work and Cleanup, the Lump Sum of _____ dollars and _____ cents (\$ _____)	1 L.S.	\$ _____
6C.	Traffic Control System for Vehicle and Pedestrian Safety, the Lump Sum of _____ dollars and _____ cents (\$ _____)	1 L.S.	\$ _____
6D.	Rodent Control, the Lump Sum of _____ dollars and _____ cents (\$ _____)	1 L.S.	\$ _____

Subtotal for Page **Base Bid** \$ _____

FORM – (BID CERTIFICATION)

If a Corporation:

Name of Contractor: _____

Signature of Bidder: _____
(Name) (Title)

Business Address: _____

Telephone Number: _____

Incorporated under the Laws of the State of: _____

President: _____
(Name) (Title)

Officers:

Secretary: _____
(Name) (Title)

Treasurer: _____
(Name) (Title)

Dated: _____

(Affix Corporation Seal Here)

If a Partnership, Individual, or Non - Incorporated Organization:

Name of Company: _____

Signature of Bidder: _____
(Name) (Title)

Name and Address of
Member of Company: _____

END OF SECTION

SECTION 01025

MEASUREMENTS AND PAYMENT

ADDENDUM #1

PART 1 GENERAL

- 1.01 GENERAL
- 1.02 PAYMENT OF WORK

PART 2 CONTROL OF WORK

- 2.01 PIPE COVER
- 2.02 DESIGN CHANGES
- 2.03 NORMAL LIMITS
- 2.04 NORMAL TRENCH LIMITS
- 2.05 NORMAL TRENCH DEPTH
- 2.06 NORMAL TRENCH WIDTHS
- 2.07 NORMAL STRUCTURE LIMITS
- 2.08 NORMAL PARKING LOT/ROAD LIMITS
- 2.09 NORMAL SIDEWALK/DRIVEWAY LIMITS

PART 3 MEASUREMENT AND PAYMENT ITEMS

- 1 WATER PIPE AND APPURTENANCES
- 2 DRAINAGE AND SEWER PIPE AND APURTENANCES
- 3 EARTHWORK
- 4 PAVEMENT (HOT MIX ASPHALT)
- 5 INCIDENTAL WORK
- 6 LUMP SUM ITEMS

PART 1 GENERAL

1.01 GENERAL

- A. The following section describes the measurement of and payment for the work to be completed under the respective items listed in the BID.

1.02 PAYMENT OF WORK

- A. Payment shall be for the price set forth in the BID and is deemed full compensation for all materials, labor, tools, equipment, and incidentals necessary to perform the work.

PART 2 CONTROL OF WORK

2.01 PIPE COVER

- A. Pipe "cover" shall be defined as the vertical distance between the ground surface and the top of pipe.

2.02 DESIGN CHANGES

- A. If changes are made in the design based on the Contract Drawings and Specifications as issued, and should such changes increase or decrease the amount of work to be done under the various Lump Sum Items on which the bid is based, adjustment will be made therefore as stipulated under the General Conditions of the Contract.

2.03 NORMAL LIMITS FOR EARTHWORK

- A. The following limits establish the normal limits for all pay items except where additional work beyond these limits is indicated on the Contract Drawings. Except as specifically directed by the Engineer or indicated on the drawings, all work beyond these limits is the responsibility of the Contractor and will not be considered a payment item.
- B. Payment for excavation above or below normal grade shall only be made if such excavation is ordered in writing by the Engineer. Excavation done at the discretion of the Contractor will not be considered for payment.

2.04 NORMAL TRENCH LIMITS

- A. Normal limits of excavation for pipe installation shall be as indicated in the tables for trench width and trench depth. Excavation above normal limits for pipe shall be defined as that excavation above the elevation corresponding to the bottom of the specified depth, and outside of the specified payment width. Excavation below normal limits shall be defined as all excavation below the elevation corresponding to the bottom of the specified depth. For excavations below the specified depth, the cost for the increased limits of excavation and backfilling shall be in addition to the cost of normal excavation and backfill limits and no deductions shall be made for the normal situation.

2.05 NORMAL TRENCH DEPTH

- A. Pipe trench depth shall be defined from the ground elevation as determined by the Engineer prior to excavation. Depth of rock excavation shall be from the top of the rock formation encountered to the depth below the invert as noted below. A minimum clear space of 6-inch shall be provided between the rock and any part of the pipe. Trench depth in open cut and sheeted areas shall be from the original ground elevation to the depth below the pipe invert as noted in the table below, which defines the normal limits of trench excavation.

B.

<u>Pipe Size</u>	<u>Depth Below Invert</u>
W.S. up to 4-in	1.2 ft.
6-in to 16-in	1.2 ft.
18-in to 21-in	1.3 ft.
24-in to 30-in	1.4 ft.
36-in and 42-in	1.5 ft.

48-in and 54-in	1.6 ft.
66-in and 54-in	1.8 ft

2.06 NORMAL TRENCH WIDTHS

A. Pipe trench widths referred to herein are the distances separating the vertical planes between which the pipe is to be laid. In computing the amount of rock excavation in trenches, granular fill, concrete backfill, replacement of utility crossings or replacement of unsuitable excavated material ordered by the Engineer for payment under the respective Items of the Bid Form, the maximum limits of trench width shall be as follows:

- a. For pipe up to 15 inches in diameter, allowable trench width at a plane 12 inches above pipe shall be no more than 36 inches. For pipe greater than 15 inches, the allowable width shall be equal to the pipe outside diameter plus 24 inches.
- b. The trench payment widths up to 10 feet deep, extending from a plane 12 inches above the pipe to the grade surface shall be:

	<u>Size</u>	<u>Width</u>
1.	Service Pipe up to 4 inches	36 inches
2.	6 inches through 15 inches	48 inches
3.	18 inches through 21 inches	60 inches
4.	24 inches through 21 inches	66 inches
5.	27 inches through 30 inches	72 inches
6.	36 inches through 30 inches	84 inches

- c. Additional width for deeper trench shall be limited to an increase of 1 foot for depths 10 feet to 15 feet and 2 feet for depths 15 feet to 20 feet.

IN ROCK

<u>Pipe Size</u>	<u>0-12 ft. Invert Depth</u>	<u>Over 12 ft. Invert Depth</u>
0-24-in	5.0 ft.	7.0 ft.
Over 24-in	Nominal Dia. +3.0 ft.	Nominal Dia. +5.0 ft.

2.07 NORMAL STRUCTURE LIMITS

A. Normal limits of excavation for structures shall be defined as that area 12 inches below the base of the structure and within a vertical line offset 2 feet from footings or 4 feet from base slabs. Excavation above normal limits for structures shall be defined as that excavation above the elevation corresponding to 12 inches below the base, and outside of the aforementioned vertical offsets of the structure for which the excavation is being

done. Excavation below normal limits shall be defined as that excavation below the elevation corresponding to 12 inches below the base of the structure for which the excavation is being done.

2.08 NORMAL ROADWAY EXCAVATION LIMIT

- A. Normal limit for roadway excavation shall be defined as 16" below existing roadway pavement grade from edge of pavement to edge of pavement as shown on the typical cross-sections on the Contract Drawings.

2.09 NORMAL SIDEWALK/DRIVEWAY LIMITS

- A. Normal limits for construction of the sidewalk/driveway shall be as defined as the bottom of the 8" dense graded gravel base and sides on the typical cross sections on the Contract Drawings.

PART 3 MEASUREMENT AND PAYMENT ITEMS

2. DRAINAGE SYSTEM APURTENANCES, SEWER PIPE AND FITTINGS, SEWER SYSTEM APURTENANCES CONT.,

ITEM 2A: FURNISH AND INSTALL 4' DIAMETER STANDARD PRECAST CATCH BASIN.

- A. Measurement for payment under item 2A shall be the actual number of 4' diameter precast concrete catch basin structure of each classification, constructed as specified.
- B. Payment for catch basin shall include furnishing and installing catch basin sump base, concrete intermediate platforms as specified on plans, oil hood and adjusting frames and covers to grade, walls and domes, complete.
- C. Payment shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary for construction of the catch basin including the walls, watertight connections, sealant, damp proofing, bases, concrete collars, excavation, temporary sheeting, backfill, dewatering, compaction as specified, disposal of surplus material, screened gravel subbase, connection of drain pipe into or exit catch basin, removal and disposal of existing catch basin, oil/grease hood and all other work necessary for constructing a complete catch basin. Payment shall also include the cost of resetting the frames and grates to accommodate final paving, and installation of stubs, knockouts and stoppers as indicated on the drawings.

ITEM 2B: FURNISH AND INSTALL CATCH BASIN FRAME AND GRATE

- A. The quantity to be measured for payment under this Item shall be the actual number of catch basin frame and grates furnished and installed as specified and shown on the contract drawings. See Detail Sheet.
- B. The unit price shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to install the catch basin frame and grate, including

excavation and disposal of the catch basin frame and grate at the Waltham DPW, backfilling and compacting, adjustment to grade, as required. Bituminous or cement concrete backfill if required will be paid for under associated item.

- C. Catch Basin frames and grates to be, models as manufactured by East Jordan Iron Works and City Standards and as shown on the construction plans.

ITEM 2C: FURNISH AND INSTALL 4' DIAMETER STANDARD PRECAST DRAIN MANHOLE.

- A. Measurement for payment under item 2C shall be the actual number of 4' diameter precast concrete drain manhole structure of each classification, constructed as specified.
- B. Payment for drain manhole shall include furnishing and installing manhole base, concrete intermediate platforms as required and/or specified on plans, and adjusting frames and covers to grade, walls and domes, complete.
- C. Payment shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary for construction of the manhole including the walls, watertight connections, sealant, damp proofing, bases, concrete collars, excavation, temporary sheeting, backfill, dewatering, compaction as specified, disposal of surplus material, screened gravel subbase, connection of drain pipe into or exit manhole, removal and disposal of existing manhole, and all other work necessary for constructing a complete manhole. Payment shall also include the cost of resetting the frames and grates to accommodate final paving, and installation of stubs, knockouts and stoppers as indicated on the drawings.

ITEM 2D: FURNISH AND INSTALL DRAINAGE MANHOLE FRAME AND COVER

- A. The quantity to be measured for payment under this Item shall be the actual number of drainage manhole frame and covers furnished and installed as specified and shown on the contract drawings. See Detail Sheet.
- B. The unit price shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to install the drainage manhole frame and cover, including excavation and disposal of the manhole frame and cover at the Waltham DPW, backfilling and compacting, adjustment to grade, as required. Bituminous or cement concrete backfill if required will be paid for under associated item.
- C. Drainage manhole frames and grates to be, models as manufactured by East Jordan Iron Works and City Standards and as shown on the construction plans.

ITEM 2E: FURNISH AND INSTALL 12" DUCTILE IRON DRAINPIPE AND FITTINGS

- A. The quantity of pipe to be paid for under Item 2E shall be based on the length of pipe installed, measured on a linear foot basis. Measurement for payment does not signify that the drain line is accepted.

- B. Measurement for length will be along the horizontal center line of pipe as installed from center to center of manholes excluding the length of manhole inverts. Connections to existing structures shall be measured to the inside face of the wall. Plugged pipe stubs in manholes shall be measured from end to end of the stub.
- C. Payment for pipe shall be based on the linear foot of pipe, and the type of pipe installed. The Contractor's attention is directed to the Technical Specifications that stipulate that all pipes between adjacent manholes shall be of the class required by the critical depth of cover between said manholes. The unit pipe prices shall include full compensation for furnishing the class of pipe or type of pipe required by the catch basin-to-manhole and/or manhole-to-manhole profile regardless of depth of cover variations.
- D. Payment shall constitute full compensation for furnishing and installing 12" diameter, class 56, cement lined, ductile iron pipe with external zinc coating at the applicable bid price. Unit price shall constitute full compensation for furnishing all labor, materials, fittings, tools, and equipment necessary for laying and jointing the pipe, unless specified elsewhere, including earth excavation (except rock excavation), saw cutting of pavement, dewatering, removal and replacement or supporting of existing utility pipes and conduits, jetting which is required, compaction as specified, portable trench box or temporary timber sheeting, disposal of surplus materials, backfilling, 12" dense graded gravel road base, screened gravel cradle, dust control, removal and disposal of existing pipe, and all work incidental thereto not specifically paid for under other items. Cost to connect to existing pipes or structures shall be included in the unit price of the pipe, including coring and masonry work.
- E. Where excavated material is not suitable for backfill and excess stockpiled excavated material is not available in sufficient quantities, payment for imported backfill shall be made under the applicable earthwork item.

ITEM 2F: CORE EXISTING STRUCTURES (DRAIN OR SEWER)

- A. The quantity to be measured for payment under this Item shall be the actual number of core complete into existing structures.
- B. The unit price shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to core an opening in and existing sewer or drain manhole, including excavation and disposal of material, booting with a Kor-n-Seal Boot (sewer) or parging the opening (drain), reconstructing invert in manhole, backfilling and compacting, as required.

ITEM 2G: REMODEL EXISTING MANHOLE OR CATCH BASIN STRUCTURE

- A. The quantity to be measured for payment under this item shall be the number of vertical feet of existing manhole or catch basin structure removed and replaced or rebuilt, below 16" from existing grade, as specified, or as directed by the Engineer.
- B. The unit price for this item shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to remove and replace or rebuild an existing

manhole or catch basin structure, including excavation and disposal of excess material, brick masonry, backfilling and compacting, adjusting to 16" below existing grade, as required by the Contract Documents or as directed by the Engineer.

3. EARTHWORK

ITEM 3A: UNCLASSIFIED EXCAVATION, GENERAL EXCAVATION AND TEST PIT EXCAVATION AND BACKFILL

- A. Should the Engineer order test pit excavation, general excavation or unclassified excavation, the Contractor shall be paid therefore under this Item. Measurement for the quantity of excavation and backfill to be paid for shall be the number of cubic yards excavated and backfilled, in place, as ordered by the Engineer.
- B. Payment shall constitute full compensation for the work of excavating, placing on-site or disposal of surplus or unsuitable materials, backfill and all work incidental thereto.

ITEM 3B: ROCK EXCAVATION, DISPOSAL AND BACKFILL

- A. Measurement for the quantity of rock to be paid for under this Item shall be the number of cubic yards of rock, measured in place before excavation, within the limits of normal excavation as specified, unless rock excavation beyond such limits has been authorized by the Engineer, in which case measurements shall be made to the authorized limits.
- B. Where rock is encountered, it shall be uncovered but not excavated until measurements have been made by the Engineer, unless in the opinion of the Engineer, satisfactory measurements can be made in some other manner.
- C. Payment for rock excavation shall be full compensation for all labor, materials, and equipment necessary for rock excavation (including all hand tool work), disposal, and furnishing, placing, and compacting acceptable backfill. The bidder should include in his bid under all items involving excavation, the cost of doing the entire excavation as earth. The unit price for rock excavation covers the difference between the cost of rock excavation and the cost of earth excavation.

ITEM 3C: GRAVEL BORROW FILL AND/OR GRAVEL BORROW REFILL OF UNSUITABLE MATERIAL

- A. When additional gravel borrow fill (not already paid for under another item in this contract) is required or, in the opinion of the Engineer, the material above or below normal limits including tests pits is unsuitable for backfill, it shall be disposed of and replaced in such volumes within the lines of payment as the Engineer may order. This Item applies only to the use of borrow refill when stockpiles of excavated suitable backfill materials are insufficient in quantity.
- B. All borrow refill shall be sand and gravel Type 3 material.
- C. The quantity to be paid for shall be equal to the number of cubic yards of unsuitable material replaced with Type 3 sand or gravel borrow.

- D. The unit price shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary for replacing of excavated material and furnishing, placing new fill material, or placing and compacting sand and gravel in such excavations and furnishing.

4. PAVEMENT

ITEMS 4A: 3" TEMPORARY TRENCH PAVEMENT

- A. The quantity to be measured for payment under this Item shall be the actual number of linear feet of 3" minimum depth trench pavement, placed in two compacted lifts and maintained as shown on the Drawings, as specified, and as directed by the Engineer. This item shall be for temporary trench pavement placed at all widths as required.
- B. The unit price for this Item shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to place a compacted 3" bituminous concrete (dense binder) course trench pavement, removing cracked or broken pieces of existing pavement from the trench edges after utility installation, saw cutting placement and adjustment of 12" dense graded gravel base course, fine grading and compaction, prime or tack coat, raising of frames and covers to trench pavement grade and to maintain the trench pavement as required by the specifications.
- C. The Contractor shall continuously maintain trench paving, as specified, and repair trench paving at his own expense. No additional compensation shall be made for labor, materials, tools, and equipment required for maintenance and/or repair of trench pavement.

ITEMS 4B: 4.5" PERMANENT TRENCH PAVEMENT

- A. The quantity to be measured for payment under this Item shall be the actual linear feet of 4.5" minimum depth trench pavement, placed in two compacted lifts and maintained as shown on the Drawings, as specified, and as directed by the Engineer. If the existing pavement thickness is greater than 4.5" then the contractor shall match the depth of the existing pavement. Item shall be for permanent trench pavement placed at all widths as required.
- B. The unit price for this Item shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to place a compacted 4.5" bituminous concrete (dense binder) course trench pavement, removing cracked or broken pieces of existing pavement from the trench edges after utility installation, placement and saw cutting, adjustment of 12" dense graded gravel base course, fine grading and compaction, prime or tack coat, raising of frames and covers to trench pavement grade and to maintain the trench pavement as required by the specifications.
- C. The Contractor shall continuously maintain trench paving, as specified, and repair trench paving at his own expense. No additional compensation shall be made for labor, materials, tools, and equipment required for maintenance and/or repair of trench pavement.

- D. A minimum compacted pavement thickness of 3" inches of dense binder shall be used to pave trenches as directed by the engineer. This item shall be used to pave the utility trenches and shall include sanding and sealing after placement.

ITEM 4C: BITUMINOUS CONCRETE PAVEMENT (HANDWORK)

- A. Measurement for payment under this Item shall be the actual number of tons of asphalt placed by hand work to a depth as directed by the engineer as shown on the Contract Drawings, as specified, or as directed by the Engineer.
- B. Payment for this Item shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary to place the bituminous pavement for driveways, berms, walkways, sidewalks, and miscellaneous areas, including saw cutting, sweeping and cleaning existing street, as required, and application of prime or tack coat, saw cutting and disposal of existing pavement, concrete, etc., raising castings, and to maintain the pavement as required by the Specifications.
- C. The Contractor shall continuously maintain paving, as specified, and repair paving at his own expense, no additional compensation shall be made for labor, materials, tools, and equipment required for maintenance and/or repair of pavement.

ITEMS 4D – 4G: GRANITE CURB

- A. Measurement for payment under these items shall be the number of linear feet of granite curb, sloped granite curb, and granite curb wall removed and reset or furnished and installed, including straight, curved, and transition curb, including inlet stones for catch basins, and return stones for driveways, all sizes, and maintained as shown on the contract drawings within the limits and as directed by the Engineer.
- B. Prices bid under the items for granite curb, sloped granite curb, and granite curb wall shall be full compensation for all labor, equipment, tools, and materials necessary to complete the work as specified, which shall include clearing and grubbing, existing curb excavation, resetting and altering to fit, cutting of curbs to length or to transition at ramps and driveways, including inlets for catch basins and return stones for driveways, furnishing and installing new curb and disposing of old curb, saw cutting pavement, excavation and disposal of bituminous concrete and cement concrete, excavation and disposal of surplus subgrade material, 12" dense graded gravel backfill for supporting curb, 3000psi cement concrete required for anchoring granite curbing, 3" minimum depth bituminous concrete to proposed grade, backfill to grade including, compacting, dewatering, restoration, removal and replacement, adjusting or supporting of existing utility pipes and conduits, daily and final cleanup, and all other incidental work relative thereto and not specifically paid for under other items of work.
- C. The Contractor shall be paid under Item 4D to remove and reset granite curb of the size and type required to best fit and match existing granite curb at the location when replacing or adding curb. Granite curbs to meet Mass Highway specifications for VA4 granite curb. Include all sizes, straight, radius, and transition curbs.

ITEMS 4H: BITUMINOUS CONCRETE SIDEWALK AND DRIVEWAY

- A. Measurement for payment under this item shall be the number of square yards of bituminous concrete sidewalk and/or driveway installed or replaced and maintained as shown on the contract drawings within the limits, and as directed by the Engineer.
- B. Payment for this Item shall constitute full compensation for furnishing all labor, materials, tools and equipment necessary to place the bituminous pavement for driveways, walkways, sidewalks, and miscellaneous areas, including sweeping, and cleaning existing street, as required, and application of prime or tack coat, saw cutting and disposal of existing pavement, concrete, etc., raising castings, and to maintain the pavement as required by the Specifications. At joints where sidewalk patches connect to existing sidewalks the joint shall be infrared and included in the square foot price.
- C. Excavation and backfill within normal limits shall be to the depth required to furnish and install the new compacted 12" dense graded gravel base and bituminous concrete to the proposed grade.
- D. The existing gravel base may be reused if determined by the engineer to be acceptable without deduction. Additional gravel if required shall be added prior to placement of the bituminous concrete at no additional cost.

ITEMS 4I – 4K: CEMENT CONCRETE SIDEWALK, DRIVEWAY, AND WHEELCHAIR RAMP

- A. Measurement for payment under these items shall be the number of square yards of cement concrete sidewalk, driveway and wheelchair ramp furnished and installed or replaced and maintained as shown on the contract drawings within the limits, and as directed by the Engineer.
- B. Prices bid under these items for cement concrete sidewalk, driveway, and wheelchair ramp shall be full compensation for all labor, equipment, tools, and materials necessary to complete the work as specified, which shall include clearing and grubbing, excavation to gravel subgrade and disposal of existing bituminous concrete or cement concrete or brick pavement or topsoil or subsoil, 8" depth of dense graded gravel base, including additional excavation and adjustment, fine grading and compaction, expansion and construction joints, installing detectable warning panels, furnish and placement of reinforcing steel as specified, 4000 psi – ¾" aggregate cement concrete for walks, driveways and wheelchair ramps to the specified depths, backfill to grade, compacting, dewatering, restoration, removal and replacement, adjusting or supporting of existing utility pipes and conduits, adjusting of castings, gate boxes, etc. to the proposed finished grade, daily and final cleanup, and all other incidental work relative thereto and not specifically paid for under other items of work.
- C. Excavation and backfill within normal limits shall be to the depth required to furnish and install the new compacted dense graded gravel base and cement concrete to the proposed grade.

- D. The existing base may be reused if determined by the engineer to be acceptable without deduction. Additional gravel if required shall be added prior to placement of the cement concrete at no additional cost.
- E. Adjustment of all water service boxes, cleanout fames & covers, and gas service boxes to final grade shall be considered incidental to Items 4I through 4K.
- F. Sidewalks at a minimum 4" cement concrete thickness shall be measured in square yards as the actual area between the back of curb or back of grass strip and back of sidewalk multiplied by the length of sidewalk. Transition areas to driveway openings shall be included under Item 4I.
- G. Driveways shall be measured in square yards as the actual area of vehicular travel at a minimum 6" cement concrete thickness and shown on the construction drawings at each driveway opening required. Cement Concrete Driveway should be included for payment under Item 4J.
- H. Wheelchair ramps at a minimum 6" cement concrete thickness shall be measured in square yards as the actual area, perpendicular to the curb, including the "level turning area" and transition area. Transition areas to the wheelchair ramp opening shall be considered for payment under Item 4K – Cement Concrete Wheelchair Ramp. Furnishing and installing a 5" detectable warning panel shall be included in the square yard unit price.

ITEM 4L: 4" PERMANENT PAVEMENT MARKING

- A. Measurement for payment under this Item shall be the actual linear feet of 4" thermoplastic lines painted within the limits indicated on the Contract Drawings or as directed by the Engineer.
- B. The unit price shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to install 4" wide, white/yellow, reflectorized, thermoplastic painted double yellow and fog lines as required.
- C. All traffic markings shall conform to the requirements of the State of MassDOT and The Manual on Uniform Traffic Control Devices (MUTCD).

ITEM 4M: 12" PERMANENT PAVEMENT MARKING

- A. Measurement for payment under this Item shall be the actual number of linear feet of 12" thermoplastic line painted within the limits indicated on the Contract Drawings or as directed by the Engineer.
- B. The unit price shall constitute full compensation for furnishing all labor, materials, tools, and equipment necessary to install 12" wide, white, reflectorized, thermoplastic painted crosswalks and stop lines as required.

- C. All traffic markings shall conform to the requirements of the State of MassDOT and The Manual on Uniform Traffic Control Devices (MUTCD).

ITEM 4N: SINGLE FACE WOODEN GUARDRAIL

- A. Measurement for payment under this Item shall be the actual number of linear feet of single faced wooden guardrail as measured along the top rail of the guardrail, furnished and installed and accepted as shown on the contract drawings within the limits, and as directed by the Engineer.
- B. Prices bid under these items for single faced wooden guardrail shall be full compensation for all labor, equipment, tools, and materials necessary to complete the work as specified, which shall include excavation, removal and disposal of existing material, saw cutting, furnishing and installing all guardrail posts, rails, and fasteners, compaction, protection or temporary relocation of existing signs, daily and final cleanup, and all other incidental work relative thereto and not specifically paid for under other items of work

5. INCIDENTAL WORK

ITEM 5A: UNIFORMED POLICE FOR TRAFFIC CONTROL

- A. Payment for special assignments of personnel of the City Police Department will be made for the actual amount invoiced to Contractor by the Police Department including the department's administrative costs. The allowance established in the Bid Form is for bidding purposes only. The actual invoiced rates may differ from these established rates.
- B. Payments made for this item are based on actual invoiced amounts which have been paid to the City Police Department by the Contractor. Paid invoices must be submitted by the Contractor for payment under this item.
- C. Contractor is responsible for coordinating ordering Police Details. Payment for this item will only be used for traffic control purposes.
- D. Cancellation of any scheduled police details due to inclement weather or any other reason shall be the responsibility of the Contractor. Contractor shall be responsible for the cost of the details not cancelled or cancelled without the proper notice to the Waltham Police Department, with no reimbursement from the City.

ITEM 5B: SILT SACK

- A. The quantity to be measured for payment under this Item shall be the actual number of silt sack furnished and installed as shown on the Contract Drawings, as specified, and as directed by the Engineer.
- B. The unit price for this Item shall include full compensation for furnishing all labor, materials, tools and equipment necessary to furnish and install, maintain as specified, remove and dispose of silt sack, complete, including earth excavation, backfill, fill,

grading, disposal of materials, clearing and grubbing, site restoration and clean-up and all incidental work, not specifically mentioned, to satisfactorily complete this Item.

- C. Silt Sacks shall be FlexStorm Pure (Trademark) Inlet Filters or approved equal. All silt sacks shall have a 2" overflow gap between the top of the silt sack and bottom of the catch basin grate.

ITEM 5C: STRAW FILTER TUBES "WATTLES" & SILT FENCE

- A. The quantity to be measured for payment under this Item shall be the actual number of linear feet of straw filter tubes "wattles", 9" minimum diameter, silt fence, and wooden anchor stakes furnished and installed as shown on the Contract Drawings, as specified, and as directed by the Engineer.
- B. The unit price for this Item shall include full compensation for furnishing all labor, materials, tools and equipment necessary to furnish and install, maintain as specified, remove and dispose of wattles, 9" minimum diameter, silt fence, and wooden anchoring stakes, complete, including earth excavation, backfill, fill, grading, disposal of materials, clearing and grubbing, site restoration and clean-up and all incidental work, not specifically mentioned, to satisfactorily complete this Item.

ITEM 5D: LOAMING AND SEEDING OR MULCH FOR LANDSCAPING REPAIR

- A. Measurement for payment under this Item shall be the actual number of square yards loamed and seeded or mulch placed at a 6" minimum depth within the limits indicated on the Contract Drawings or as directed by the Engineer.
- B. Payment shall constitute full compensation for excavation and to subgrade for loam and disposing of excess subgrade material, furnishing, and placing loam (min. 6" of loam) and seed or mulch (min. 6"), grading, compacting, and providing establishment of growth of grass as specified.

ITEM 5E: REMOVE AND DISPOSE OF TREE 30" DIAMETER AND UNDER

- A. Measurement for payment under this Item shall be the actual number of trees, up to and including 30" in diameter, removed and disposed of as required for the construction within the limits indicated on the Contract Drawings or as directed by the Engineer. Included in the work is the excavation of all root systems, stumps, and debris of the trees removed.
- B. The unit price for this item shall include full compensation for furnishing all labor, materials, tools, and equipment necessary to remove and dispose of the trees as specified. Payment shall be per the actual number of trees removed and disposed.

ITEM 5F: TREE PLANTING

- A. Measurement for payment under this Item shall include the furnishing and installation of the trees as shown on the Contract Drawings, as specified and as directed by the Engineer.

- B. The unit price for this item shall include full compensation for furnishing all labor, materials, tools, and equipment necessary to install the trees. Payment shall be per the actual number of trees furnished and installed.

ITEM 5G: UNMARKED IRRIGATION UTILITIES REPAIR

- A. Measurement for payment under this item shall be the actual number of unmarked irrigation utilities damaged during construction.
- B. Payment shall constitute full compensation to remove and replace the irrigation utility if damaged with same size pipe, fittings, connectors, to restore the utility to operation. The replacement material to be used shall be approved by the engineer prior to making corrective actions. Prices bid under this Item shall include furnishing all labor, materials, tools, and equipment to repair the existing utility, which shall include shutting down existing water as necessary, including excavation, backfill, compaction, dewatering, disposal of surplus or unsuitable materials, temporary sheeting or bracing as required.

6. LUMP SUM ITEMS

GENERAL

- A. The extent of utility relocations required for the completion of lump sum items are shown on the contract drawings. All work associated with support of utilities in conjunction with any of these lump sum items shall be included within the scope of the lump sum item.

ITEM 6A: MOBILIZATION AND DEMOBILIZATION

- A. The lump sum price for this Item shall constitute full compensation for furnishing at the project site, all men and equipment necessary to properly commence and complete the various sections of work described in the bid. Mobilization costs are those costs incurred in initiating the contract and providing for the above-mentioned equipment and labor to be operational at the site, exclusive of the cost of materials. For purposes of this contract, operational shall mean the substantial commencement of work. The lump sum price of this work shall not exceed five percent (5%) of the total bid amount. Bids not in compliance with the above may be considered unresponsive and may be rejected for that reason.
- B. Mobilization may be considered as complete by the Engineer when the Contractor commences work on the project with a full complement of men and equipment necessary to expeditiously perform and complete the required work in the opinion of the Engineer. The Engineer may authorize a percent (%) complete of this Item for payment if all the mobilization has not been accomplished. A breakdown of the lump sum price must be submitted to the Engineer.
- C. The lump sum price for mobilization shall include coordinating a location for staging and storing stockpiled materials including private agreements and fees that may be associated. The City of Waltham is not responsible to provide or coordinate.

- D. Payment for the lump sum price bid in the proposal for mobilization shall be full compensation for all costs and work involved under this Item.

ITEM 6B: MISCELLANEOUS WORK AND CLEAN-UP ITEMS

- A. Measurement for payment for miscellaneous work and cleanup shall be on lump sum basis.
- B. Payment of the lump sum price under the Item 6B of the Bid Form shall fully compensate the Contractor for labor, materials, equipment, and incidentals required to do all work specified below, and shown on the Drawings, and any other miscellaneous work obviously necessary to complete the Contract. Payment shall include but not be limited to supporting all existing utilities, modification to existing utilities, maintaining existing drainage flows, removal and resetting of fences, walls, landscape boulders, driveway edging etc., and the Contractor shall be responsible for site restoration and cleanup upon completion of the project and to comply with the provisions of Section 02995 of these specifications.

In addition, to allow the installation of the proposed water system, the Contractor shall do the following, which is paid for under Item 6B.

- The temporary and permanent relocation and protection of any trees, signs, benches, mailboxes, newspaper holders, trash barrels, post office boxes, planters, etc. located along the roadway and on the existing sidewalks prior to proposed construction activities.
- Protection, support, and retention of all existing bounds and property monuments. All bounds and monuments disturbed by the contractor shall be reinstalled by a Professional Land Surveyor licensed within the Commonwealth of Massachusetts at the Contractor's expense and no additional cost to the Contract.
- Removing and resetting and/or protection of all existing traffic signs within the project area.
- Removal and disposal of existing traffic signal and pole at the intersection of Lexington Street and Jack's Way as shown on Sheet 5 of the Contract Drawings. The Contractor shall remove and dispose of all components of the signal and pole including but not limited to signal head, pole, all internal components, pole base, concrete footing, abandonment of existing conduit. All disposal shall be done in accordance with all Federal, State, and Local laws and regulations.
- Clearing and grubbing as required.
- Coordinating a location for staging and storing stockpiled materials.
- Coordination with utility companies both Public and Private.

- Coordination with all adjacent projects as specified in Section 01010 – Summary of Work.
- Protection of the trees and roots located adjacent to and within the limit of work.
- Protection and support of telephone poles, hydrants, and other obstructions located adjacent to and within the limit of work.
- All slope protection and erosion control measures including fiber rolls and catch basin silt sacks, necessary to comply with the requirements of Section 02270 and as shown on contract documents, not specifically paid for under item 5B/5C.
- All permits as specified in Section 00821.
- All calcium chloride and water as required to control and maintain dust control on site.
- Furnishing and installing all temporary pavement markings on all paved surfaces where pavement markings are disturbed as a result of the work.
- As built & tie cards.
- Pre-construction video/photo.
- Compaction Control and Testing.
- Protecting and/or resetting mailboxes and posts as required.
- Adjust all castings within the limits of work to finish grade prior final paving.
- Abandon existing drain lines in place that are to be replaced.
- Adjustment of catch basin frame & grate at station 27+00
- Installation of thermoplastic pavement symbols and legends shown on Sheet 5

C. The Engineer may authorize a percent (%) complete of this Item for payment if not all the work has been accomplished. A breakdown of the lump sum price must be submitted to the Engineer at the start of work.

ITEM 6C: TRAFFIC CONTROL SYSTEM FOR VEHICULAR AND PEDESTRIAN SAFETY

A. The lump sum for this Item shall constitute full compensation for the Contractor to submit a Traffic Management Plan for review and approval by the City of Waltham. The

Traffic Management Plan shall be designed by a Massachusetts certified traffic engineer, complete as detailed in the Specifications. See Section 01570.

- B. The lump sum for this Item shall constitute full compensation for the Contractor to implement the Traffic Management Plan shall be designed by the Contractor's Massachusetts certified traffic engineer, complete as detailed in the Specifications. See Section 01570.
- C. The lump sum price for this Item shall include furnishing all labor, materials, tools, and equipment to start up and implement the traffic control system including all signs, barriers, warning light, and any detour controls as specified and as deemed necessary by the City.
- D. The Engineer may authorize a percent (%) complete of this Item for payment if not all the work has been accomplished. A breakdown of the lump sum price must be submitted to the Engineer at the start of work.

ITEM 6D: RODENT CONTROL AND GENERAL PEST CONTROL

- A. The lump sum for this Item shall constitute full compensation for the implementation of the Contractor's Integrated Pest Management (IPM) approach, complete as detailed in the Specifications.
- B. The Rodent Control Plan shall include bait boxes placed within the project area at a minimum of 100' intervals.
- B. The lump sum price for this Item shall include furnishing all labor, materials, tools, and equipment to start up and implement the Contractor's IPM approach including all required submittals, qualifications, coordination, permits, etc., as specified, and as deemed necessary by the Engineer, Owner, and/or all associated City and State Agencies.
- C. The Engineer may authorize a percent (%) complete of this Item for payment if not all the work has been accomplished. A breakdown of the lump sum price must be submitted to the Engineer at the start of work.

END OF SECTION

Section 00400

COMPLIANCE FORMS

(PLEASE COMPLETE AND SUBMIT THESE FORMS WITH YOUR RESPONSE)

ORIGINAL "WET" SIGNATURES ARE REQUIRED IN ALL OF THE FOLLOWING DOCUMENTS

NON-COLLUSION FORM AND TAX COMPLIANCE FORM

CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity or group of individuals. The undersigned certifies that no representations made by any City officials, employees, entity, or group of individuals other than the Purchasing Agent of the City of Waltham was relied upon in the making of this bid

_____, _____
(Signature of person signing bid or proposal) Date

(Name of business)

TAX COMPLIANCE CERTIFICATION

Pursuant to M.G.L. c. 62C, & 49A, I certify under the penalties of perjury that, to the best of my knowledge and belief, I am in compliance with all laws of the Commonwealth relating to taxes, reporting of employees and contractors, and withholding and remitting child support.

_____, _____
Signature of person submitting bid or proposal Date

Name of business

NOTE

Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal.

CERTIFICATE OF VOTE AUTHORIZATION

Date:

I _____, Clerk of _____ hereby certify that at a meeting of the Board of Directors of said Corporation duly held on the _____ day of _____ at which time a quorum was present and voting throughout, the following vote was duly passed and is now in full force and effect:

VOTED: That _____ (*name*) is hereby, authorized, directed and empowered for the name and on behalf of this Corporation to sign, seal with the corporate seal, execute, acknowledge and deliver all contracts and other obligations of this Corporation; the execution of any such contract to be valid and binding upon this Corporation for all purposes, and that this vote shall remain in full force and effect unless and until the same has been altered, amended or revoked by a subsequent vote of such directors and a certificate of such later vote attested by the Clerk of this Corporation.

I further certify that _____ is duly elected/appointed _____ of said Corporation whose signature appears below as an officer

Signature of Officer

SIGNED:

Clerk of the Corporation: (Corporate Seal)

Print Name: _____

COMMONWEALTH OF MASSACHUSETTS

County of _____

Date:

Then personally appeared the above named and acknowledged the foregoing instrument to be his/her free act and deed before me, and provided to me through satisfactory evidence of identification which were _____ to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public;

My Commission expires: _____

CORPORATION IDENTIFICATION

The bidder for the information of the Awarding Authority furnishes the following information.

If a Corporation:

Incorporated in what state _____

President _____

Treasurer _____

Secretary _____

Federal ID Number _____

If a foreign (out of State) Corporation – Are you registered to do business in Massachusetts?

Yes _____, No _____

If you are selected for this work you are required under M.G.L.ch. 30S, 39L to obtain from the Secretary of State, Foreign Corp. Section, State House, Boston, a certificate stating that you Corporation is registered, and furnish said certificate to the Awarding Authority prior to the award.

If a Partnership: (Name all partners)

Name of partner _____

Residence _____

Name of partner _____

Residence _____

If an Individual:

Name _____

Residence _____

If an Individual doing business under a firm's name:

Name of Firm _____

Name of Individual _____

Business Address _____

Residence _____

Date _____

Name of Bidder _____

By _____

Signature _____

Title _____

Business Address _____ (POST OFFICE BOX NUMBER NOT ACCEPTABLE)

City _____ State _____ Telephone Number _____ Today's Date _____

CERTIFICATE OF AUTHORITY LIMITED LIABILITY COMPANY

The undersigned, being (a/the) duly elected, qualified and active (member / manager) of _____, a Massachusetts limited Liability Company (hereinafter "the Company")

Does Hereby Certify that

1. The Articles of Organization of the Company were duly filed with the Office of the Secretary of State of the State of Massachusetts on _____, and the Articles of Organization have not been (further) amended.
2. The Company has complied with the publication requirements contained in Section 67 of the Limited Liability Company Law.
3. There exists an Operating Agreement of the Company and that the said Operating Agreement has not been amended or repealed and that the said Operating Agreement remains in full force and effect as of this date.
4. Neither the Articles of Organization nor the Operating Agreement (as amended) require any further act to be taken or a meeting to be held by its members other than as follows:
5. All said requirements, whether as contained in the Articles of Organization or in the Operating Agreement or by operation of law as to the transaction of _____, 20____ have been met.
6. The following person or persons has/have been duly authorized by the Company to execute all documents in connection with said transaction and that the signature appearing to the right of their name(s) is his/her genuine signature.

NAME	OFFICE HELD	SIGNATURE
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

IN Witness Whereof, the undersigned has executed this Certificate of Authority this _____ day of _____, 20____.

(Signature)

STATE OF MASSACHUSETTS, COUNTY OF _____

On the ____ day of _____, 20____, before me, the undersigned personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/ they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public: _____

My Commission Expires: _____

Notary Stamp:

RIGHT TO KNOW LAW

Any vendor who receives an order or orders resulting from this invitation agrees to submit a Material Safety Data Sheet (MSDS) for each toxic or hazardous substance or mixture containing such substance, pursuant to M.G.L. c. 111F, §§8,9 and 10 and the regulations contained in 441 CMR 21.06 when deliveries are made. The vendor agrees to deliver all containers properly labeled pursuant to M.G.L. c. 111F §7 and regulations contained in 441 CMR 21.05. Failure to furnish MSDS and/or labels on each container may result in civil or criminal penalties, including bid debarment and action to prevent the vendor from selling said substances, or mixtures containing said substances within the Commonwealth. All vendors furnishing substances or mixtures subject to Chapter 111F or M.G.L. are cautioned to obtain and read the laws, rules and regulations referenced above. Copies may be obtained from the State House Bookstore, Secretary of State, State House, Room 117, Boston, MA (617) 727-2834.

Authorized Signature Indicating Compliance with the Right-to-know laws:

Signature

Date

Print Name

NOTE

Failure to submit any of the required documents, in this or in other sections, with your bid response package may cause the disqualification of your proposal.

MASSACHUSETTS WEEKLY CERTIFIED PAYROLL REPORT FORM



Company's Name:		Address:				Phone No.:			Payroll No.:									
Employer's Signature:		Title:				Contract No:		Tax Payer ID Number		Work Week Ending:								
Awarding Authority's Name:		Public Works Project Name:				Public Works Project Location:			Min. Wage Rate Sheet Number									
General / Prime Contractor's Name:		Subcontractor's Name:				"Employer" Hourly Fringe Benefit Contributions												
Employee Name & Complete Address	Work Classification:	Employee is OSHA 10 certified (?)	Appr. Rate (%)	Hours Worked							Project Hours (A) All Other Hours	Hourly Base Wage (B)	Health & Welfare Insurance (C)	ERISA Pension Plan (D)	Supp. Unemp. (E)	Total Hourly Prev. Wage (F)	Project Gross Wages	Check No. (H)
				Su.	Mo.	Tu.	We.	Th.	Fr.	Sa.							(B+C+D+E)	

Are all apprentice employees identified above currently registered with the MA DLS's Division of Apprentice Standards? YES NO

For all apprentices performing work during the reporting period, attach a copy of the apprentice identification card issued by the Massachusetts Department of Labor Standards / Division of Apprentice Standards. No apprentices are identified above

NOTE: Pursuant to MGL c. 149, s. 27B, every contractor and subcontractor is required to submit a **true and accurate** copy of their certified weekly payroll records to the awarding authority by first-class mail or e-mail. In addition, each weekly payroll must be accompanied by a statement of compliance signed by the employer. Failure to comply may result in the commencement of a criminal action or the issuance of a civil citation.

Date Received by Awarding Authority / /
--

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c. 149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form is available from the Department of Labor Standards (DLS) at www.mass.gov/dols/pw and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

On a weekly basis, every contractor and subcontractor is required to submit a certified copy of their weekly payroll records to the awarding authority; this includes the payroll forms and the Statement of Compliance form. The certified payroll records must be submitted either by regular mail or by e-mail to the awarding authority. Once collected, the awarding authority is required to preserve those records for three years from the date of completion of the project.

Each such contractor and subcontractor shall furnish weekly **and** within 15 days after completion of its portion of the work, to the awarding authority directly by first-class mail or e-mail, a statement, executed by the contractor, subcontractor or by any authorized officer thereof who supervised the payment of wages, this form, accompanied by their payroll:

STATEMENT OF COMPLIANCE

_____, 20_____

I, _____,
(Name of signatory party) (Title)

do hereby state:

That I pay or supervise the payment of the persons employed by

_____ on the _____
(Contractor, subcontractor or public body) (Building or project)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.

Signature _____

Title _____

DEBARMENT CERTIFICATION

In connection with this bid and all procurement transactions, by signature thereon, the respondent certifies that neither the company nor its principals are suspended, debarred, proposed for debarment, declared ineligible, or voluntarily excluded from the award of contracts, procurement or non procurement programs from the Commonwealth of Massachusetts, the US Federal Government and /or the City of Waltham. "Principals" means officers, directors, owners, partners and persons having primary interest, management or supervisory responsibilities with the business entity. Vendors shall provide immediate written notification to the Purchasing Agent of the City of Waltham at any time during the period of the contract of prior to the contract award if the vendor learns of any changed condition with regards to the debarment of the company or its officers. This certification is a material representation of fact upon which reliance will be placed when making the business award. If at any time it is determined that the vendor knowingly misrepresented this certification, in addition to other legal remedies available to the City of Waltham, the contract will be cancelled and the award revoked.

Company Name _____

Address _____

City _____, State _____, Zip Code _____

Phone Number (____) _____

E-Mail Address _____

Signed by Authorized Company Representative: _____

_____ Print name. Date _____

10 HOURS OSHA TRAINING CONFIRMATION

Chapter 306 of the Acts of 2004

CONSTRUCTION PROJECTS

AN ACT RELATIVE TO THE HEALTH AND SAFETY ON PUBLIC

The undersigned hereby certifies that all employees to be employed at a worksite for construction, reconstruction, alteration, remodeling, repair, installation, demolition, maintenance or repair of any public work or any public building estimated to cost more than \$10,000.00 have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first payroll report for each employee and will comply with all laws and regulations applicable to awards of subcontracts subject to section 44F.

Company Name: _____

Address: _____

Signature: _____

Title: _____

Print Name _____

Date _____

See following Chapter 306 of the Acts of 2004

NOTE

Failure to submit any of the required documents, in this or in other sections, with your bid response package will be cause for the disqualification of your company.

SECTION 02990

GUARDRAIL

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General Conditions and Division 1 Specification Sections, apply to this Section.

1.2 REFERENCES

- A. All work specified in this Section shall conform to "Standard Specifications for Road and Bridge Construction" of the Massachusetts Department of Transportation, latest revision, herein referred to as "State Standards".

1.3 SUMMARY

- A. This Section includes the following:
 - 1. Guardrail
 - 2. Treatments for anchorage of guardrail end sections buried outside of the roadway clear zone and buried in earth-cut slopes as shown on the plans.
- B. Related Sections include the following:
 - 1. Section 02200 Earthwork for soil materials, excavating, backfilling, and site grading.

1.4 SUBMITTALS

- A. Shop Drawings shall be submitted containing information on the dimension, materials, and hardware used to construct the guardrail.
- B. Layout drawings showing the layout, locations of bends, crash guards, and the limit of transitions.
- C. Concrete mix design for concrete end anchor.
- D. Record, or as-built, drawings identifying and accurately locating guardrail placement.

1.5 PROJECT CONDITIONS

- A. The Contractor shall ensure that no utilities will be impacted with the installation of the guardrail.
 - 1. Any broken or damaged utilities resulting from the installation of the guardrail shall be repaired or reinstalled as required by the Engineer or Utility Company at the Contractor's sole expense.
 - 2. Contractor is responsible to coordinate the proposed utility and guard rail locations to ensure that proposed utilities installed by the Contractor do not conflict with the installation of the proposed guardrail.

- B. Guardrail shall be installed in a straight line or in a consistent arc as depicted on the Drawings.
Posts shall be set plumb. Any posts or beams not set in alignment shall be removed and reset by the Contractor to meet these requirements at no additional cost to the Owner. Presence of rock, utilities installed by the Contractor, or other constraints will not relieve this requirement

PART 2 - PRODUCTS

2.1 TIMBER GUARDRAIL

- A. All timber items shall be pressure-treated sawn structural lumber, either spruce or fir, and shall conform to the requirements of AASHTO M168.
- B. Timber Rail shall be cut from the specified grade for dry, well-seasoned and dressed spruce or fir, which shall meet the applicable requirements of AASHTO M168. Where preservative treatment is specified this shall conform to the requirements for "Preservative Treatments for Timber" of the AASHTO Standard Specifications for Highway Bridges. Timber Preservatives shall conform to the requirements of AASHTO M133.
- C. Timber posts shall be fabricated from an approved or specified timber species and shall be of the quality, diameter, or section, and length as specified or as shown on the Plans. Treated posts shall be fabricated before treatment in accordance with AASHTO M133.

2.2 CONCRETE END ANCHORS

- A. Concrete for anchors shall have a 28-day compressive strength of 3,000 psi and conform to the project concrete specification.
- B. Steel reinforcement shall conform to the project concrete specifications.

2.3 HARDWARE

- A. Splices and end connections shall be of the type and design specified or shown on the Plans, and shall be of such strength as to develop the full design strength of the rail elements.
- B. Unless otherwise specified, all fittings, bolts, washers, nuts, and other accessories shall be galvanized in accordance with the requirements of AASHTO M111. All galvanizing shall be done after fabrication.
- C. End anchor rods and accessories shall be as specified or as shown on the Plans and shall be of such size and strength as to develop the full design strength of the rail elements.

PART 3 - EXECUTION

- 3.1 Install guardrail in accordance with Section 600 of the State Standards. The Construction Method outlined below was taken from the State Standards.
- A. Guard Rail
1. With the exception of anchor posts, all posts shall be mechanically driven. Suitable caps and equipment must be used by the Contractor to prevent damage to the posts while driving into place. The area adjacent to the post shall be backfilled and thoroughly compacted.
 2. If rock is found, material must be removed in order to make a sufficient hole for the post. The hole formed shall be compacted and backfilled before the posts are driven.
 3. All posts shall be set plumb and aligned with the rail, then the rail elements are to be erected to create a smooth rail as shown on plans.
 4. Rail elements shall be erected to produce a smooth, continuous installation, all as indicated on the Plans.
 5. The terminal sections and rail elements shall be lapped in the direction of traffic. No traffic to be permitted along the roadway at the end of each day of work due to safety issues with terminating the guide rail ends. Anchors and end sections shall be placed prior to installing guardrail parallel to traffic.
 6. The Contractor is responsible for furnishing extra-long posts at transition areas or where field conditions require. The posts shall be of such length that the minimum depth in the ground, as shown on the plans, is provided.
 7. End anchor posts shall be set in excavated holes. Areas adjacent to the post shall be backfilled and compacted.
 8. All bolts shall be drawn tight. Bolts shall be of sufficient length to extend beyond the nuts.
- B. Concrete End Anchors
1. Excavate hole for end anchor.
 2. Construct forms, place rebar and anchor bolts as required.
 3. Place concrete in accordance with State Standards.
 4. Backfill in accordance with Section 02200 "Earthwork".

END OF SECTION