

# City Of Torrington

ENGINEERING DEPARTMENT  
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140 Main Street • City Hall  
Torrington, CT 06790-5245

## **Addendum Number #1** **October 6, 2015**

Main Street Realignment and Streetscape Improvements – Phase 2  
City of Torrington  
State Project No.143-184 and 143-190

1. Replace Bid Form – Exhibit “A” pages BF-1 through BF-12 with the attached revised Bid Form pages BF-1 through BF-12 dated 10/6/2015.
2. Replace Special Provision 02010 Clearing and Demolition, pages SP-02010-1 through SP-02010-3 with the attached revised pages SP-02010-1 through SP-02010-3 dated 10/6/2015.
3. Replace Special Provision 02620, Scored Concrete Sidewalk and Concrete Root Barrier, pages SP-02620-1 through SP-02620-5 with the attached revised pages SP-02620-1 through SP-02620-5 dated 10/6/2015.
4. Replace Special Provision 09930, Parking and Traffic Signs, pages SP-09930-1 through SP-09930-2 with the attached revised pages SP-09930-1 through SP-09930-2 dated 10/6/2015.
5. Revise dates in the Information for Bidders page IFB-3 in the last sentence of the first paragraph under “Time of Completion/Dates of Completion and Liquidated Damages” from (April 8, 2016 to July 8, 2016) to (April 4, 2016 to July 8, 2016).
6. The project’s Part ‘A’ work on the west side of Main Street is associated with Project Number 143-184 and shall be invoiced separately. The project’s Part ‘B’ work on the east side of Main Street is associated with Project Number 143-190 and shall be invoiced separately.

**BID FORM - EXHIBIT "A"**

**MAIN STREET REALIGNMENT AND  
STREETSCAPE IMPROVEMENTS - PHASE II  
TORRINGTON, CONNECTICUT**

**Section A.** The Contractor shall provide unit prices for the following items associated with work to be completed on the West Side of Main Street between Church Street and Water Street/East Main Street

**Note: Bid items that have the same bid item number in Sections A and B of this Bid Form shall be bid at the same unit price. Do not use different unit price bids for the same bid items.**

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section A Total Amount</u>
0000109A	340	2" Schedule 40 PVC Conduit the price per linear foot of  Dollars and Cents	\$	\$
0201001A	1	Clearing and Demolition (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  Dollars and Cents	\$	\$
0202351A	2	Unsuitable Trench Excavation, the price per cubic yard of  Dollars and Cents	\$	\$
0202452A	2	Test Pit the price per each of  Dollars and Cents	\$	\$
0202896A	1	Storage and Protection of Public (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  Dollars and Cents	\$	\$
0263101A	885	Brick Paver Sidewalk the price per square foot of  Dollars and Cents	\$	\$

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section A Total Amount</u>
0404109A	1000	Bituminous Concrete Patching the price per square foot of  Dollars and Cents	\$	\$
0507449A	2	Type "CM" Catch Basin with Granite Curb Inlet, the price per each of  Dollars and Cents	\$	\$
0604399A	1	As-Built Plans (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  Dollars and Cents	\$	\$
0612994A	1	Concrete Cylinder Curing Box (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  Dollars and Cents	\$	\$
0651651A	30	15" HDPE Pipe (Smooth Interior) the price per linear foot of  Dollars and Cents	\$	\$
0813041A	325	6"X18" Granite Stone Curbing the price per linear foot of  Dollars and Cents	\$	\$
0813051A	75	6"X18" Granite Curved Stone Curbing the price per linear foot of  Dollars and Cents	\$	\$
0921001A	4250	Scored Concrete Sidewalk the price per square foot of  Dollars and Cents	\$	\$

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section A Total Amount</u>
0921004A	82	Concrete Root Barrier the price per linear foot of  Dollars and Cents	\$	\$
0947207A	1	Bicycle Stand the price per each of  Dollars and Cents	\$	\$
0949100A	90	Flexi-Pave Tree Pit the price per square foot of  Dollars and Cents	\$	\$
0949840A	4	Columnare Red Maple (Acer rubrum 'Columnare') 2.5"-3" CAL. MIN., B&B, SINGLE STEM, 6' min. the estimated price of  Dollars and Cents	\$	\$
0950027A	4	Planter Container (Paseo 30" long x 30" wide x30" high) the price per each of  Dollars and Cents	\$	\$
0970006A	1	Traffic Person (Municipal Police Officer) the estimated price of Five Thousand No Dollars and Cents	\$ 5,000.00	\$ 5,000.00
0970007A	1	Traffic Person (Uniformed Flagger) the estimated price of Six Thousand No Dollars and Cents	\$ 6,000.00	\$ 6,000.00

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section A Total Amount</u>
0971001A	1	Maintenance & Protection of Traffic, (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  _____ Dollars and _____ Cents	\$ _____	\$ _____
975004	1	Mobilization & Project Closeout (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0980101A	1	Construction Staking (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0992089A	1	Parking Pay Station and Concrete Foundation the price per each of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0992090A	1	Bench the price per each of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0992104A	2	Trash Receptacle the price per each of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0992133A	9	Decorative Light Pole & Luminaire the price per each of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0992134A	3	Decorative Luminaire Replacement Fixture the price per each of  _____ Dollars and _____ Cents	\$ _____	\$ _____

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section A Total Amount</u>
1002011A	7	New Light Pole Concrete Base the price per each of  Dollars and Cents	\$	\$
1002012A	3	Modified Existing Light Pole Concrete Base the price per each of  Dollars and Cents	\$	\$
1010002A	4	Handhole the price per each of  Dollars and Cents	\$	\$
1102002A	1	8' Aluminum Pedestal the price per each of  Dollars and Cents	\$	\$
1106002A	2	2 Way Pedestrian Signal, Pole Mounted the price per each of  Dollars and Cents	\$	\$
1106003A	1	1 Way Pedestrian Signal, Pedestal Mounted the price per each of  Dollars and Cents	\$	\$
1107007A	4	Pedestrian Pushbutton and Sign (PIEZO) the price per each of  Dollars and Cents	\$	\$
1118051A	1	Temporary Signalization the lump sum price of (Bid this item at the same unit price in both Sections A & B.)  Dollars and Cents	\$	\$

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section A Total Amount</u>
1208932A	16	SignFace- Sheet Aluminum (Type IV Retroreflective Sheeting) the price per square foot of _____ Dollars and _____ Cents	\$ _____	\$ _____
1210101A	394	4" White Epoxy Resin Pavement Markings the price per linear foot of _____ Dollars and _____ Cents	\$ _____	\$ _____
1210102A	691	4" Yellow Epoxy Resin Pavement Markings the price per linear foot of _____ Dollars and _____ Cents	\$ _____	\$ _____
1210105A	647	Epoxy Resin Pavement Markings, Symbols and Legends the price per square foot of _____ Dollars and _____ Cents	\$ _____	\$ _____
1211002A	1946	Removal of Pavement Markings the price per square foot of _____ Dollars and _____ Cents	\$ _____	\$ _____
1212002A	480	Temporary Plastic Pavement Marking Tape- 4" White the price per linear foot of _____ Dollars and _____ Cents	\$ _____	\$ _____
1212002A	175	6" Preformed Black Line Mask Pavement Marking Tape the price per linear foot of _____ Dollars and _____ Cents	\$ _____	\$ _____

**Section 'A' Summary:**

**A. West Side of Main Street** (Church St. to Water St./East Main St.) subtotal: \$ \_\_\_\_\_

(In the event of any discrepancies between written words and figures in connection with any bid item, the words shall prevail.)

**BID FORM - CONT.**

**Section B.** The Contractor shall provide unit prices for the following items associated with work to be completed on the **East Side of Main Street** between **Church Street and East Main Street.**

**Note: Bid items that have the same bid item number in Sections A and B of this Bid Form shall be bid at the same unit price. Do not use different unit price bids for the same bid items.**

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section B Total Amount</u>
0000109A	768	2" Schedule 40 PVC Conduit the price per linear foot of  Dollars and Cents	\$	\$
0000110A	145	Additional 2" Schedule 40 PVC conduit in same trench the price per linear foot of  Dollars and Cents	\$	\$
0201001A	1	Clearing and Demolition (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  Dollars and Cents	\$	\$
0202351A	1	Unsuitable Trench Excavation, the price per cubic yard of  Dollars and Cents	\$	\$
0202452A	1	Test Pit the price per each of  Dollars and Cents	\$	\$
0202896A	1	Storage and Protection of Public (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  Dollars and Cents	\$	\$



<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section B Total Amount</u>
0263100A	480	Granite Paver Sidewalk the price per square foot of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0263101A	1200	Brick Paver Sidewalk the price per square foot of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0404109A	1100	Bituminous Concrete Patching the price per square foot of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0507201A	1	Type "CL" Catch Basin the price per each of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0507449A	1	Type "CM" Catch Basin with Granite Curb Inlet, the price per each of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0507467A	1	Modified Existing Catch Basin with Type "CM" Double Grate Top (Type II) the price per each of  _____ Dollars and _____ Cents	\$ _____	\$ _____
0604399A	1	As-Built Plans (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  _____ Dollars and _____ Cents	\$ _____	\$ _____
06122994A	1	Concrete Cylinder Curing Box (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of  _____ Dollars and _____ Cents	\$ _____	\$ _____

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section B Total Amount</u>
0813040A	480	6" x 12" Granite Stone Curbing the price per linear foot of  Dollars and Cents	\$	\$
0921001A	8050	Scored Concrete Sidewalk the price per square foot of  Dollars and Cents	\$	\$
0921004A	36	Concrete Root Barrier the price per linear foot of  Dollars and Cents	\$	\$
0947207A	1	Bicycle Stand the price per each of  Dollars and Cents	\$	\$
0949100A	50	Flexi-Pave Tree Pit the price per square foot of  Dollars and Cents	\$	\$
0949840A	2	Columnare Red Maple (Acer rubrum 'Columnare') 2.5"-3" CAL. MIN., B&B, SINGLE STEM, 6' min. the price per each of  Dollars and Cents	\$	\$
0950027A	9	Planter Container (Paseo 30" long x 30" wide x30" high) the price per each of  Dollars and Cents	\$	\$
0970006A	1	Traffic Person (Municipal Police Officer) the estimated price of Five Thousand No Dollars and Cents	<b>\$5,000</b>	<b>\$5,000</b>

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section B Total Amount</u>
0970007A	1	Traffic Person (Uniformed Flagger) the estimated price of Six Thousand Dollars and No Cents	<b>\$6,000</b>	<b>\$6,000</b>
0971001A	1	Maintenance & Protection of Traffic, (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of Dollars and Cents	\$	\$
0975001A	1	Mobilization & Project Closeout (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of Dollars and Cents	\$	\$
0980101A	1	Construction Staking (Bid this item at the same unit price in both Sections A & B.) the price per lump sum of Dollars and Cents	\$	\$
0992089A	1	Parking Pay Station and Concrete Foundation the price per each of Dollars and Cents	\$	\$
0992090A	1	Bench the price per each of Dollars and Cents	\$	\$
0992104A	1	Trash Receptacle the price per each of Dollars and Cents	\$	\$

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section B Total Amount</u>
0992133A	8	Decorative Light Pole & Luminaire the price per each of  Dollars and Cents	\$	\$
0992134A	1	Decorative Luminaire Replacement Fixture the price per each of  Dollars and Cents	\$	\$
1002011A	6	New Light Pole Concrete Base the price per each of  Dollars and Cents	\$	\$
1002012A	2	Modified Existing Light Pole Concrete Base the price per each of  Dollars and Cents	\$	\$
1010002A	6	Handhole the price per each of  Dollars and Cents	\$	\$
1106001A	3	1 Way Pedestrian Signal, Pole Mounted the price per each of  Dollars and Cents	\$	\$
1106002A	1	2 Way Pedestrian Signal, Pole Mounted the price per each of  Dollars and Cents	\$	\$
1107007A	4	Pedestrian Pushbutton and Sign (PIEZO) the price per each of  Dollars and Cents		\$

<u>Item No.</u>	<u>Total Est. Qty.</u>	<u>Description</u>	<u>Unit Price</u>	<u>Section B Total Amount</u>
1118051A	1	Temporary Signalization the lump sum price of (Bid this item at the same unit price in both Sections A & B.) Dollars and Cents	\$	\$
1208932A	18	SignFace- Sheet Aluminum (Type IV Retroreflective Sheeting) the price per square foot of Dollars and Cents	\$	\$

**Section 'B' Summary:**

**B. East Side of Main Street** (between Church St. & East Main St.) subtotal: \$ \_\_\_\_\_  
 (In the event of any discrepancies between written words and figures in connection with any bid item, the words shall prevail.)

**BID SUMMARY**

**A. West Side of Main St.** (Church St. to Water St./E. Main St.) subtotal \$ \_\_\_\_\_

**B. East Side of Main Street** (Church St. to East Main St.) subtotal \$ \_\_\_\_\_

**Total Bid Amount (A+B)** \$ \_\_\_\_\_

**Total Bid Amount (A+B) of above items to be inserted on "Bid Proposal" Form (Page BP-1)**

**End of Bid Form**

**SPECIAL PROVISION 02010  
CLEARING AND DEMOLITION**

**ITEM #0201001A - CLEARING AND DEMOLITION**

**PART 1 – GENERAL**

**1.01 SCOPE OF WORK**

A. Demolition includes, but is not limited to, sawcutting, excavation and removal of existing curbs, sidewalks, driveways, manmade structures, pavements, abandoned utilities, abandon metal pipe sleeves and valves and similar construction items. Demolition also includes removal and disposal of, trash, debris, and all other materials found on or near the surface of the ground in the construction area and understood by generally accepted engineering practice not to be suitable for construction of the type contemplated. Work includes saw cutting of pavements and sidewalks and removal of existing material to proposed subgrade elevations. The “No Parking” and traffic signs and posts and pedestrian signals equipment shall be removed and delivered to the City’s traffic authority’s garage. The City’s Traffic Authority may elect to have the Contractor dispose of signs and posts and pedestrian signal equipment that are in poor conditions. Signs, posts and pedestrian signal apparatus to be reused and relocated shall be removed stored and then reset as part of this work. Also included in the work is the removal of existing above-ground and underground non-active utilities and associated structures including but not limited to all abandoned utility conduits, pipes, valves or meters and boxes. Work also includes the removal of existing lighting poles, mast poles, foundations, pedestrian signal equipment and street light luminaries. Work includes abandonment of the loop detector in the existing right turn lane at the intersection of Water and Main Streets. Work under this item shall include the removal and off-site disposal of existing trees, stumps, parking meter posts and foundations, trash cans, advertising boxes, Lions Club drop off box, metal access panels or hatchway covers, mail box, and trees as shown on the Contract Drawings and any other items identified on the plans for removal for which no specific pay item exists or directed by the Engineer.

B. Demolition materials and debris shall be removed from the Project Area and legally disposed of in legally acceptable disposal areas in accordance with applicable Federal, State and local codes and regulations.

C. Voids and/or depressions below the original ground surface resulting from the removal of utilities, hardscape items, sidewalk and pavement or from the result on over excavation shall be filled with suitable imported processed aggregate base material and compacted to make the surface conform to the adjacent subgrade surface of the ground.

D. The Contractor shall visit the site and verify the location of all pertinent items prior to submitting a bid so that the difficulties associated with execution of the contract are fully understood. No additional compensation will be allowed for failure to be so informed. No claims whatsoever shall be considered for encountering structural abnormalities, or abandoned utilities or structures.

E. This item will also include contacting the City Police Department to schedule the police to remove the parking meter heads prior to the post removal. The removal of the U.S. Mail box shall be done under the direction of the U.S. Postal Service. Any existing benches or planters shall be removed and given to the adjacent business owners if owner elects to keep items or if business owners decline then disposed of offsite.

F. The existing stone curbing determined by the ENGINEER to be salvage shall be removed with care to avoid damage and, shall be removed and transported to the “City Dog Pound” on Bogue Road. No separate payment will be made for the transportation of salvaged granite curb. Existing stone curbing deemed to be in unsatisfactory condition by the ENGINEER shall be removed from the site and disposed of by the CONTRACTOR.

**1.02 UTILITIES**

A. It shall be the Contractor’s responsibility to determine the actual location of all utilities. The Contractor shall promptly repair or have repaired by applicable utility company any damage incurred to utilities during

construction work at no cost to City or the utility company. The Contractor shall maintain existing utilities to remain in service to adjacent buildings.

B. All pavements to be removed including sidewalks where the adjacent surface is to remain shall be saw cut prior to excavation. Sawing existing pavements is required in order to produce a clean vertical and neat edge without damage to the remaining pavement. Temporary replacement pavement for the street along new curbs shall be a patch per detail. All restoration work shall be performed immediately following installation of new curbs and backfill completion. Work includes saw cutting existing pavement adjacent to walls so smaller pieces of pavements can be removed without damage to the walls. Contractor shall include in his Clearing and Demolition bid all costs associated with the additional time and additional precautionary measures that are needed in the areas where abutting walls.

C. The Contractor shall not interrupt existing utilities serving adjacent buildings, except when authorized in writing by authorities having jurisdiction or ownership. Any temporary interruption necessary shall be directly coordinated and supervised by utility company personnel. Upon receiving such authorization the Contractor shall provide and maintain temporary services during interruptions of existing utilities, as acceptable to utility company, governing authorities and the building owner.

D. Demolition work associated with excavating, removing and disposing of all existing manholes, catch basins, junction boxes, hand holes, old basement hatchways, utility bases, conduits, and pipes and shall include providing additional gravel backfill materials, and compaction. Work shall include bulkheading pipes to remain where noted on Plan Drawings.

E. The contractor shall jack hammer and remove the upper portion of the existing light pole bases (including cutting off the steel anchors) measured from the finished surface elevation in lieu of full base removal. The electrical supply conduits and pedestrian signal wiring shall not be cut and shall be reused to work with new light pole and pedestrian walk fixtures. See Special Provision 16000, Lighting and General Electrical for additional requirements on light pole base work.

F. The Contractor shall remove existing streetlight standard, base, pole, brackets, wiring, associated hardware and luminaire(s) indicated on the plans or as directed by the Engineer. All materials removed shall remain the property of the Contractor and shall be disposed of except that the existing LED luminaire(s), flag/flower basket brackets and brackets for the winter holiday season decorative ornaments shall be detached and returned to the City. The existing luminaire(s), flag/flower basket brackets and brackets for the winter holiday season decorative ornaments shall be detached /removed prior to the removal of the light standard pole/base. Work includes the associated demolition of areas where conduits, light bases and handhole are to be installed for proposed lighting between Maiden Lane and Church Street intersections. The Contractor shall coordinate the disconnection of the electrical supply to the light standards with Eversource. The Contractor shall give notice to Eversource as soon as possible in order to allow Eversource lead time to schedule the power deactivation and reactivation work upon installation of new lighting.

### 1.03 PROTECTION AND SAFETY

A. Protection and safety of the surrounding community and property shall take the highest priority during demolition operations. The City of Torrington is not responsible for safety measures employed during demolition or construction. The City of Torrington has no contractual duty to control the safest methods or means of the work, job site responsibilities, supervision or to supervise safety and does not voluntarily assume any such duty or responsibility.

B. All construction operations shall be conducted so as to prevent damage to adjacent buildings, structures and other facilities and injury to persons. Special care and attention shall be taken by Contractor when working directly along the adjacent buildings. Existing building foundations are old and impacts may cause damage. Contractor shall repair or replace any damage caused by demolition or construction activities at his own expense. The Contractor shall put into place special protective measures to prevent flooding of adjacent buildings.

C. The Contractor shall make a careful examination of the materials to be demolished and of the adjoining property and utilities which are to remain and take whatever precautions are necessary to carry on operations so as to prevent any settlement, collapse, damage or other impacts to adjacent buildings, structures, stoops, utilities and

other existing features. During all operations, the Contractor is responsible for the structural integrity of these structures and surrounding structures relative to any problems or damages resulting from the performance of the Contractor's work. The Contractor shall notify the City immediately if the safety of an adjacent structure or facility is endangered or if any movement has occurred. The Contractor must provide interior and exterior shoring, bracing or support to prevent movement or settlement of the adjacent structures when safety concerns warrant. Any damage inflicted upon adjacent property, construction or utilities by the Contractor's work must be corrected promptly by the Contractor at no cost to the City.

D. All work adjacent to occupied buildings which may produce fire hazards or create nuisances or safety and health hazards from noise, vibration, gases, vapors, fumes, dust mists, or odors shall not be performed unless preventive controls or measures are implemented. Special attention is brought to adjacent building fresh air intakes, air conditioning units, etc. which need protection from dust during demolition.

E. The plans show an existing fire hydrant and valve to be removed. The Contractor shall coordinate and schedule the permanent removal of the hydrant and valve with the Torrington Water Company. The Contractor shall sufficiently excavate at the hydrant lateral main line tee location to allow the Torrington Water Company to remove the tee from the main water line. The Contractor shall also excavate at the hydrant location to allow the Torrington Water Company to remove the hydrant. The remaining hydrant lateral shall be bulkheaded by the Contractor. Work also includes the removal of a water valve and a valve box located in the sidewalk in front of the Warner Theater's Main Entrance. The Contractor shall sufficiently excavate the area at the valve location to allow the Torrington Water Company to remove the valve and replace the lateral pipe section.

Work includes saw cutting pavement/sidewalk, excavation, bulkheading pipes, backfill and compaction and pavement restoration, scheduling and coordination with the utility company and associated work.

#### 1.04 OCCUPANCY AND ADJACENT PROPERTIES

A. The adjacent buildings shall maintain their present occupancy and function. (Any vacant units that become occupied during the project time shall be included). The Contractor shall take any and all measures necessary to protect persons associated with these properties from harm and damage during clearing and demolition activities, as well as maintaining emergency vehicle and pedestrian traffic around the clearing and demolition area. Fire and police access shall be maintained. The Contractor shall conduct demolition operations and removal of debris in a manner that ensures the least interference with the roadway, pedestrian walkways, parking and other adjacent occupied facilities.

### **PART 2 - METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

A. There will be no separate measurement or payment for each individual clearing and demolition work component listed under this Special Provision. There will be no separate measurement and payment for any costs associated with cutting, removal, disposal and capping of an inactive or abandoned utility. There will be no separate measurement or payment for work associated with the abandonment of the traffic loop or adjusting conduits and handholes, existing utility valve/box tops, or new replacements to grade. There shall be no separate measurement of payment for the work associated with the removal of an existing fire hydrant or water valve. There will be no separate measurement or payment for coordination work between the contractor and utility companies.

B. Payment for this work will be at the contract lump sum bid for "Clearing and Demolition", and shall include all equipment, tools, and labor incidental to the completion of all work under this item. The overall lump sum price shall be divided equally between Sections A and B in the Bid Form. The prices shall also include the work associated with lighting improvements from the Main Street intersections of East Main Street to Church Street.

**"Clearing and Demolition" will be paid for under Item #0201001A**

END OF SECTION



**SPECIAL PROVISION 02620**

**SCORED CONCRETE SIDEWALK AND  
CONCRETE ROOT BARRIER**

**ITEM #0921001A – Scored Concrete Sidewalk**

**ITEM #0921004A – Concrete Root Barrier**

**ITEM #0612994A - Concrete Cylinder Curing Box**

**PART 1 - SCOPE**

- 1.01 The work covered by this Special Provision includes furnishing all transportation, labor, layout, equipment, appliances and materials, and of performing all operations in connection with the construction of Concrete Sidewalks, and Concrete Root Barriers. Accessible ramps including the detectable warning strips are included in the work.
- 1.02 The scoring pattern and surface finish shall follow the typical details and plan view shown on construction drawings or as directed by the Engineer.
- 1.03 Work includes installing PVC sleeves in the new concrete sidewalk to be used for installation of traffic and parking signs. The locations and the specifications for the sleeves shall be confirmed with the City's Traffic Authority and the Engineer. Work shall include reviewing underground utilities to avoid interference problems. A field meeting is required with the Traffic Authority and Engineer prior to placement of any sleeves. **The sleeves shall have 4" inside diameter set to 30" minimum depth.** An alternative to the sleeves includes coring concrete and underlying material. Any void area left around sign posts shall be grouted.
- 1.04 The flexural strength of the concrete shall be monitored by the evaluation of compressive strength cylinders. The compressive strength specimens shall be cast and cured in the field in accordance with AASHTO T 23. After proper curing, these cylinders shall be transported to the Division of Materials Testing for strength evaluation. Work under this section of the specifications shall include furnishing a box for curing concrete test cylinders. The box shall be commercially available and manufactured specifically for curing concrete test cylinders. The box will remain the property of the Contractor at the conclusion of the project. The box shall be delivered and located in the City Hall garage/basement (140 Main Street Torrington CT) for the duration of the project.

**PART 2 - MATERIALS**

- 2.01 Submit the product data for each type of product and design mixture indicated for approval.
- 2.02 The concrete for granite stone curb foundations and "Concrete Root Barrier" shall conform to the requirements of Article M.03.01 for Class "F" Concrete, of the STANDARD SPECIFICATIONS.
- 2.03 Materials for Scored Concrete Sidewalk shall conform to the requirements of Article M.03.01 of the STANDARD SPECIFICATIONS, for Class "F" Concrete (4,000psi). The concrete shall contain not less than 5% nor more than 7% entrained air at the time the concrete is deposited in the forms. Air-entrainment shall be obtained and the concrete cured in accordance with the provisions of Article 4.01.03 for Concrete Pavement. Welded Wire Fabric (6"x6"- 10/10) shall be used as detailed. Construction and Contraction Joints shall have ½" diameter x 12" long galvanized steel dowels and sleeves placed at 4 foot on centers along longitudinal joints and 2 foot on center for traverse joints perpendicular to the street or where directed by Engineer if needed. Note dowels shall be smooth surface to allow movement within sleeves. A pre-formed or pre-molded expansion joint filler manufactured for intended purposed shall be submitted and approved by City.
- 2.04 "Saltguard" a Proscos Concrete sealer for salt protection shall be applied on the concrete finish. If a substitute product is proposed by the Contractor then the contractor shall submit product information for City approval. The

product shall be specifically manufactured for this type of application. The rate of application shall be as recommended by manufacturer. A curing period recommended by the manufacturer shall be followed prior to application of the "Saltguard".

- 2.05 Processed aggregate for base shall conform to Article M.05.01, Grade B for processed aggregate base and pavement of the STANDARD SPECIFICATIONS.
- 2.06 The Detectable Warning Strip shall be a prefabricated detectable warning surface tile as manufactured from Engineered Plastics Inc. 300 International Drive, Suite 100 Williamsville, NY 14221, telephone number (800) 682-2525 or the approved equal from ADA Fabricators, INC. P.O Box 179 North Billerica, MA 01862 telephone number (978) 262-9900. The tile shall conform to the dimensions shown on the plans and have a gray homogeneous color throughout in compliance with Federal Standard 595 Color FS 36496 or approved equal.
- 2.07 Contractor shall submit for approval manufacturer's specification for silicone water proofing material to be applied at the face of the building façade where the sidewalk abuts.
- 2.08 A catalog cut listing detailed specifications of the box and operating instructions from the manufacturer must be submitted to the Engineer. The box and its components shall be constructed of non-corroding materials and shall be capable of storing a minimum of 18 test cylinders, 6" X 12" (152 mm X 305 mm) stored vertically with the lid closed. The lid must be watertight when closed and hinged in the back with security latches on the front that can be padlocked. The box must be capable of holding water to a maximum level of one inch above test cylinders placed in the box vertically. A drain hole must be provided in a wall of the box to allow manual drainage of the water that exceeds this level. A drain hole must also be provided at the bottom of the box so that it can be manually emptied. The temperature of the water must be controlled by heating and cooling device capable of maintaining the temperature of the water within a range of 60 to 80° F, +/- 2 °F (15.5 to 26.7 °C, +/- 1 °C) within an outside ambient air temperature range of -10 to 120 ° F (-23.3 to 49 °C). The heating and cooling device must be positioned to allow free circulation of air and water around the cylinders and be rated at 120 volts and 15 amps. A rack must be provided within the box to support the cylinders above the pool of temperature controlled water. The device must be thermostatically controlled with a digital readout that is capable of displaying the high/low water temperature within the box since the last reading was taken.

### **PART 3 – CONSTRUCTION METHODS**

- 3.01 Construction methods for concrete sidewalks shall conform to the requirements Article 9.21.03, of the STANDARD SPECIFICATIONS.
- 3.02 Demolition shall conform to Special Provision 02010, Clearing and Demolition of these Technical Specifications.
- 3.02 Scored Concrete Sidewalk subgrade shall be prepared in accordance with the STANDARD SPECIFICATIONS, Section 2.09.03, Construction Methods. Extra care shall be taken by Contractor as not to disturb existing buried underground facilities. Contractor shall take special measures to protect such underground facilities.
- 3.03 When connecting new concrete sidewalk to a section of existing concrete sidewalk, the connection point shall be at the nearest joint in the existing sidewalk, or if no existing joint is in the area where sidewalk is to terminate, then contractor shall saw cut the existing sidewalk to create a straight and neat terminal joint. The limits on new sidewalk shall be more defined during a field meeting prior to construction with the City Engineer. Existing concrete shall be drilled to accommodate dowels.
- 3.04 Subbase and Processed Aggregate Base: See Special Provision 02220 Excavation, Trenching, Backfilling, and Compacting for requirements on materials, compaction and testing.
- 3.05 Forms: Forms shall be of metal or wood, straight, free from warp and of sufficient strength to resist springing from the pressure of the concrete. If made of wood, they shall be of 2-inch surfaced plank except that at sharp curves thinner material may be used. If made of metal, they shall be of approved section and shall have a flat surface on the top. Forms shall be of a depth equal to the depth of the sidewalk. Forms shall be securely staked, braced and

held firmly to the required line and grade and shall be sufficiently tight to prevent leakage of mortar. All forms shall be cleaned and oiled or wetted before concrete is placed against them. Sheet metal templates 1/8 inch in thickness, of the full depth and width of the walk, shall be spaced at intervals of 12 feet or as directed. If the concrete is placed in alternate sections, these templates shall remain in place until concrete has been placed on both sides of the template. As soon as the concrete has obtained its initial set, the templates shall be removed.

- 3.06 Concrete: The concrete shall be proportioned, mixed, placed, etc., in accordance with the provisions of Section 6.01 for Class "F" Concrete (4,000psi) of the STANDARD SPECIFICATIONS, except as modified herein. The surface of the concrete shall be finished as shown on City Standard details as shown attached herein. Tests will be taken by an independent qualified trained geotechnical hired by the City. A slump test shall be taken on each concrete truck delivered at site. Acceptable slump test results shall be 3½" plus or minus ½ inch. Air entrainment tests (AASHTO T 152) shall also be done on each concrete truck delivered to the site and acceptable range shall be as specified in paragraph 2.03 above. Concrete cylinders for compression tests shall be done on every 20 cubic yards delivered to the site as a minimum. The City testing consultant will perform other random testing as directed by the city. Preparation and procedure standards for concrete cylinders testing shall follow AASHTO T 141, AASHTO T 126, and AASHTO T 22. The minimum compressive strength for the Class F concrete test shall 4,000 psi.
- 3.07 The Detectable Warning Strip for new construction shall be set directly in poured concrete according to the plans and the manufacturer's specifications or as directed by the Engineer. The contractor shall place two 25-pound concrete blocks or sandbags on each tile to prevent the tile from floating after installation in wet concrete.
- 3.08 The contractor shall measure the grades of sidewalk, driveway, and ramp, slope and cross slope by means of an M-D Building Products Smart Tool™ 24" level or approved equal. Measurements shall be taken during preparation of the base layers, and as the concrete surface is finished. Sidewalk grades shall slope to drain away from buildings to gutter at grades shown on contract drawings or approved in the field by the City if the Contractor contemplates a problem.
- 3.09 The Contractor shall provide protection of the finished surface during curing. Any graffiti shall not be acceptable. Any panel sections that are vandalized, damaged or written on with graffiti shall be replaced at the Contractor's expense. Removal of unacceptable concrete work shall be the entire panel unit between joints. The contractor shall factor weather conditions such as rain into his schedule before pouring new concrete. **Covering the concrete with plastic will not be allowed.**
- 3.10 Pedestrian access to the adjacent buildings shall be the Contractor's responsibility and he shall coordinate schedule with building tenants and owners. Building access shall be maintained by staging work or by some other means as agreed upon by tenants and/or owners.
- 3.11 Concrete Root Barrier shall be constructed in accordance with the contract plan drawings as detailed. The size of the Concrete Root Barrier shall not exceed dimensions shown on plan details so as not to encroach in space to be occupied by tree root ball/roots.
- 3.12 The Contractor shall maintain the curing box in working order. The Contractor will be allow to plug curing box into City Hall electrical service at no costs. Water needed for the operation of the curing box will be available from the hose bib located mounted on the wall adjacent to the City Hall garage door. Any curing box that is not operating properly, as determined by the Engineer, shall be replaced within 24 hours by the Contractor at no expense to the State. The Engineer reserves the right to prohibit placement of fresh concrete on the project until a curing box acceptable to the Engineer is operational on the project site.

#### **PART 4 – MEASUREMENT**

- 4.01 Scored Concrete Sidewalk will be measured by the actual number of square feet of completed and accepted. Driveway and Accessible ramps will not be measured as a separate pay item but will be paid under the concrete sidewalk item.
- 4.02 Concrete Root Barrier will be measured by the actual number of linear feet of "Concrete Root Barrier" completed in place and accepted.

- 4.03 4” PVC sleeves or coring for traffic and parking sign installation shall be not be measured for payment and shall be included in the price for sign installation.
- 4.04 One curing box shall be used for the entire project and will be measured for payment per lump sum delivered by the Contractor and accepted by the Engineer.

**PART 5 – PAYMENT**

- 5.01 “Scored Concrete Sidewalk” will be paid for at the Contract unit price per square foot, complete in place. The unit prices for this item shall include subgrade preparation and compaction work, gravel, processed aggregate base, concrete, reinforcement mesh and dowels, sealer, joint filler, detectable warning strip, finishing, layout, scoring, equipment, tools, materials and labor incidental thereto. Driveway and accessible ramps including the detectable warning strips will not be paid as a separate item and will be considered part of the concrete sidewalk work and shall be paid under the unit price for “Scored Concrete Sidewalk”.
- 5.02 Concrete Root Barrier will be paid at the Contract unit price per linear feet of "Concrete Root Barrier" completed in place and accepted. The unit prices for this item shall include the cost of all materials, labor and equipment necessary for the complete installation of the Concrete Root Barrier as detailed on the contract drawings.
- 5.03 In the case where the minimum 28 day compressive test or air entrainment test results do not meet specifications, then Pay Adjustment Factors shown in Chart #1 below shall be used in calculating adjusted quantities for payment in lieu of replacing concrete work. The adjusted pay quantity shall equal the product of both adjustment factors and the installed measured quantity. An example is as follows:

**Example**

Test Date	Ave. 28 day (psi)	Installed Quantity (sf)	Compressive Strength Adjustment Factor %	Air test %	Air Adjustment Factor %	Adjusted Pay Quantity (sf)
10-Sep	3940	1146.0	100	7	100	<b>1146.0</b>
11-Sep	3345	748.7	85	6.5	100	<b>636.4</b>
17-Sep	3665	359.5	95	4.3	98	<b>334.7</b>
1-Oct	4275	552.1	100	4	94	<b>519.0</b>
Subtotals		2806.4				<b>2636.1</b>

**Chart #1 - Pay Adjustment Factors**

<b>Compressive Strength (%)</b>	<b>Adjusted range (psi)</b>	<b>Pay Factor (%)</b>
95 or greater	3,800 to 4,000	100
90 to 94.9	3,600 to 3,799	95
85 to 89.9	3,400 to 3,599	90
80 to 84.9	3,200 to 3,399	85
75 to 79.9	3,000 to 3,199	80
Below 75% will be rejected		

<b>Measured Air %</b>		<b>Pay Factor (%)</b>
4.5 to 7.5		100
4.3 and 4.4	7.6 and 7.7	98
4.1 and 4.2	7.8 and 7.9	96
3.9 and 4.0	8.0 and 8.1	94
3.7 and 3.8	8.2 and 8.3	92
3.5 and 3.6	8.4 and 8.5	90
Less than 3.5% or greater than 8.5% entrained air will be rejected		

5.04 “Concrete Cylinder Curing Box” will be paid for at the contract unit price per lump sum delivered and accepted on the project, which price shall include all submittals, material, tools, equipment, transportation, maintenance and labor incidental thereto for the duration of the project. This price shall be divided equally between Sections A & B shown on the Bid Form.

**“Scored Concrete Sidewalk” will be paid under Item #0921001A.**

**“Concrete Root Barrier” will be paid under Item #0921004A.**

**“Concrete Cylinder Curing Box” will be paid for under Item #0612994A.**

END OF SECTION

**SPECIAL PROVISION 09930**  
**PARKING AND TRAFFIC SIGNS**

**ITEM #1208932A –SIGN FACE - SHEET ALUMINUM (TYPE IV RETROREFLECTIVE SHEETING)**

**PART 1 – SCOPE**

- 1.01. Work under this Special Provision shall conform to the requirements of Section 12.08, Sign Face – Sheet Aluminum (Type IV Retroreflective Sheeting) of the CDOT Form 816 Standard Specifications except where specifications modified and specifically written below. Also, all references to parapet mounted sign supports shall be deleted.
- 1.02. Work under this Special Provision includes all labor, materials, equipment and supervision required to manufacture and install parking signs including handicap signs, restricted parking zone signs and designated lane signs. The signs related to parking/pay station shall match existing sign dimensions and design that had previously been installed on Main Street between Maiden Lane and Mason Street.

**PART 2 – MATERIALS**

- 2.01 Replace the paragraph in Article M.18.5 – Sign Mounting Bolts, of the Standard Specification with the following:  
  
Bolts used for sign mounting shall be stainless steel and conform to ASTM F593, Group 1 or 2 (Alloy Types 304 or 316). Locking nuts shall be stainless steel and shall conform to ASTM F594 (Alloy Types 304 or 316). Washers shall also be stainless steel and shall conform to ASTM A240 (Alloy Types 304 or 316).

**PART 3 - SUBMITTALS**

- 3.01 Shop drawings and sign samples shall be submitted for approval:
  - A. Specific layout and design for the signs. Include size and type of fasteners, connectors, dimensions, size/thickness of material, type of material, finish and manufacturer.

**PART 4 – EXECUTION**

- 4.01 INSTALLATION
  - A. Work includes coring the finished sidewalk/brick for installation of traffic and parking signs. The locations and the specifications for the cores shall be confirmed with the City’s Traffic Authority and Engineer. Work shall include reviewing underground utilities to avoid interference problems. A field meeting is required with the Engineer and City’s Traffic Authority prior to coring any holes. The cores shall have 4” inside diameter set to 30” minimum depth. After placement of the posts the core area shall be grouted.
  - B. Engineer shall approve post alignment for directional alignment/viewing from the roadway. Height measured from the sidewalk surface to the bottom of the sign shall be 7 feet.

**PART 5 - METHOD OF MEASUREMENT AND BASIS OF PAYMENT**

- 5.01 The quantity for which payment will be made will be the number of square feet for “Sign Face - Sheet Aluminum (Type IV Retroreflective Sheeting)” furnished and install, complete in place. This work will be paid for at the contract unit price per square foot for “Sign Face - Sheet Aluminum (Type IV Retroreflective Sheeting)” complete in place, which price shall include all layout of signs, sign production, samples, transportation, coring and grouting, sign posts, hardware, attachments, accessories and all materials, equipment, tools, and labor incidental thereto.

**“Sign Face - Sheet Aluminum (Type IV Retroreflective Sheeting)” will be paid under Item # 1208932A**

**End of Section**