

Town of Branford  
Project No. L014-0002  
Main Street Reconstruction and Rehabilitation  
Addendum #5

Date: March 24, 2025

Submission Date: **March 26, 2025 no later than 2:00pm (unchanged from Add. #3)**

Prospective bidders, and all those concerned, are hereby informed that the following is made a part of the bid documents, which should be amended as follows:

### **WRITTEN QUESTIONS AND CLARIFICATIONS**

**For clarification** – Questions received between March 20th and March 24<sup>th</sup> are included within this Addendum #5.

#### **Clarifications**

#### **Bidder Questions**

1. *Addendum 3 Clarification 4 mentions 5 items. How are these items paid? Are they paid by the appropriate bid item unit prices? Have the bid sheet quantities been updated or will they not be?*

**W&S Response:**

**Items noted in Addendum 3 Clarification 4, shall be paid for under their respective item numbers.**

**See the attached updated Bid Form.**

2. *There is no Spec. Section 0814009A Removal, Transport, Cleaning and Delivery to store 5,000 LF in the Spec. documents. Is there anything there that the bidders should be aware of?*

**W&S Response:**

**See the attached specification.**

3. *There is no pay items for the concrete steps and handrails shown on Detail 5 on Sheet No. DET-16 and Sheet No. LA-4. Where should we carry the cost of these items?*

**W&S Response:**

**See attached Metal handrail specification and the revised Bid Form that includes the following additional items:**

- **0601108 Concrete Stairs: 35 LF**
- **0914001A Metal Handrail with Powdercoat Finish: 16 LF**

Respectfully Submitted,

John M. Hoefflerle, PE, CFM  
Town Engineer

Please acknowledge receipt of the addendum below and submit with your bid submittal.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Company:** \_\_\_\_\_

**2. THIS BID IS DETERMINED AS FOLLOWS:**

**PROPOSAL ITEMS**

NOTE: Bidder must bid on each item. All entries in the entire proposal must be made clearly and in ink; prices must be written in both words and figures. In case of discrepancy, the written unit price shall govern. (Bidders should insert extended item total obtained from quantities and unit prices).

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0101000A	1 L.S.	Environmental Health and Safety, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0101117A	3600 C.Y.	Controlled Materials Handling, per Cubic Yard \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0101128A	1 L.S.	Securing, Construction and Dismantling of a Waste Stockpile and Treatment Area, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0101133A	200 Ton	Disposal of Contaminated Railroad Ties, per Ton \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0201001A	1 L.S.	Clearing and Grubbing, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202000	6200 C.Y.	Earth Excavation, per Cubic Yard \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0202100	350 C.Y.	Rock Excavation, per Cubic Yard  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202315A	5000 Ton	Disposal of Controlled Materials, per Ton  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202452A	2 Ea.	Test Pit, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202501	850 L.F.	Cut Concrete Pavement, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202502	11400 S.Y.	Removal of Concrete Pavement, per Square Yard  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0205004	100 CY	Rock in Trench Excavation, 0'-10' Deep, per Cubic Yard  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202529	440 L.F.	Cut Bituminous Concrete Pavement, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0202563A	4000 L.F.	Removal of Trolley Tracks, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202598A	1 EA	Relocate Stone Pillar, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202911A	1 L.S.	Pre-Construction Documentation Exterior, per Lump Sum  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0202912A	1 L.S.	Pre-Construction Documentation Interior, per Lump Sum  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0209001	12200 S.Y.	Formation of Subgrade, per Square Yard  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0212000	3200 C.Y.	Subbase, per Cubic Yard  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0219001	1500 L.F.	Sedimentation Control System, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0219011A	43 EA.	Sedimentation Control System at Catch Basin, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0304002	1320 C.Y.	Processed Aggregate Base, per Cubic Yard \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0406002A	2000 S.Y.	Temporary Pavement, per Square Yard \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0406170	2690 Ton	HMA S1.0, per Ton \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0406172	1350 Ton	HMA S0.375, per Ton \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0406236	2350 GAL.	Material for Tack Coat, per Gallon \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0406600	1350 Ton	Material Transfer Vehicle, per Ton \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0406999A	5,400 EST.	Asphalt Adjustment cost (Estimated Cost), per Est \$ <u>One</u> _____ Dollars and <u>zero</u> Cents (\$ <u>1.00</u> )	\$ <u>5,400</u>
0586001.10	15 EA.	Type 'C' Catch Basin - 0'-10' Deep, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____ )	\$ _____
0586001.20	2 EA.	Type 'C' Catch Basin - 0'-20' Deep, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____ )	\$ _____
0586013.10	10 EA.	Offset Type 'C' Catch Basin - 0'-10' Deep, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____ )	\$ _____
0586018.10	1 EA.	Offset Type 'C-L' Catch Basin - 0'-10' Deep, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____ )	\$ _____
0586040.10	1 EA.	Type 'C-L' Catch Basin - 0'-10' Deep, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____ )	\$ _____
0586500.10	1 EA.	Manhole - 0'-10' Deep, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____ )	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0586750	13 EA.	Type 'C' Catch Basin Top, per Each \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0586780	11 EA.	Manhole Frame and Cover, per Each \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0586790.10	7 EA.	Remove Drainage Structure - 0'-10' Deep, per Each \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0653002	1 L.S.	Clean Drainage System, per Lump Sum \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0601108	35 L.F.	Concrete Stairs, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0686000.12	600 L.F.	12" R.C. Pipe - 0'-10' Deep, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0686000.15	220 L.F.	15" R.C. Pipe - 0'-10' Deep, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____



<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0686000.18	125 L.F.	18" R.C. Pipe - 0'-10' Deep, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0686000.24	120 L.F.	24" R.C. Pipe - 0'-10' Deep, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0686002.12	800 L.F.	12" R.C. Pipe (Class V) - 0'-10' Deep, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0686002.15	40 L.F.	15" R.C. Pipe (Class V) - 0'-10' Deep, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0686900	1 EA.	Concrete Pipe Connection, per Each \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0813012	2300 L.F.	5" X 18" Granite Stone Curbing, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0813013	870 L.F.	5" X 18" Granite Curved Stone Curbing, per Linear Foot \$ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0813015A	290 L.F.	5" X 20" Granite Stone Curbing, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0813016A	25 L.F.	5" Granite Stone Curbing (Special), per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0813445A	21 EA.	Radial Granite Curb Driveway Return, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0814002A	1090 L.F.	Reset Existing Granite Stone Curbing, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0814009A	5090 L.F.	Removal, Transport, Cleaning and Delivery to store, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0914001A	16 L.	Metal Handrail with Powdercoat Finish, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0915002A	45 EA.	Tree Protection, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0921001	450 S.F.	Concrete Sidewalk, per Square Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0921006A	3500 S.F.	Brick Paver Sidewalk Ramp, per Square Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0921015A	155 L.F.	Granite Paver Band, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0921018A	53,020 S.F.	Brick Paver Walk, per Square Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0921048	400 S.F.	Detectable Warning Surface, per Square Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0922050A	4565 S.F.	Decorative Crosswalk, per Square Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0922500	200 S.Y.	Bituminous Concrete Driveway (Commercial), per Square Yard \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0922507A	3000 S.F.	Brick Paver Driveway, per Square Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0942001	6 Ton	Calcium Chloride for Dust Control, per Ton \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0943004A	1 L.S.	Dust Control, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0944000	2400 S.Y.	Furnishing and Placing Topsoil, per Square Yard \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0947207A	4 EA.	Bike Stand, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0947302A	1 L.S.	Remove, Refurbish and Reset Bus Shelter, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0947305A	1 EA.	Reset Existing Dedication Plaque, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0949056.1	649 EA.	Aronia Melanocarpa 'UConnAM012', Ground Hug Black Chokeberry, #1 Container, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949080	15 EA.	Clethra Alnifolia 'Hummingbird', Hummingbird Summersweet, #1 Container, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949157	94 EA.	Helenium Autumnale 'Fuego', Mariachi Fuego, #1 Container, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949360	1 EA.	Prunus Sargentii 'JFS-KW58', Pink Flair Sargent Cherry, 2"-2.5" Cal., per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949405	242 EA.	Rhus Aromatica 'Gro-Low', Gro-Low Fragrant Sumac, #1 Container, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949493	6 EA.	Ulmus Americana 'Princeton', Princeton American Elm, 2.5"-3" Cal., per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0949520	420 EA.	Sporobolus Heterolepis 'Tara', Tara Prairie Dropseed, #1 Container, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949716	3 EA.	Cornus X Rutgersensis 'Rutgan', Stellar Pink Dogwood, 2.5"-3" Cal., per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949770	1 EA.	Acer Rubrum 'October Glory', October Glory Red Maple, 2.5"-3" Cal., per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949874.1	2 EA.	Liquidambar Styrciflua 'Happdell', Happidaze Sweet Gum, 2.5"-3" Cal., per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949957.1	1 EA.	Liriodendron Tulipifera, Tulip Poplar, 2.5"-3" Cal. , per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0949986	1 EA.	Quercus Rubra, Red Oak, 2.5"-3" Cal., per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0950019A	2400 S.Y.	Turf Establishment - Lawn, per Square Yard  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0952103.1A	1 EA.	Rain Garden Planter – Site No. 1, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0952104.1A	8 EA.	Tree Pit – Type 1 Typical, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0952104.2A	1 EA.	Tree Pit – Type 1 Special, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0952105.1A	15 EA.	Tree Pit – Type 2 Typical, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0952105.2A	1 EA.	Tree Pit – Type 2 Special – Site No. 1, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0952105.3A	1 EA.	Tree Pit – Type 2 Special – Site No. 2, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0952105.4A	1 EA.	Tree Pit – Type 2 Special – Site No. 3, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0952106.1A	6 EA.	Tree Pit – Type 3 Typical, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0970006	200,000.00	Traffic Person (Municipal Police Officer), per EST. \$ <u>One</u> _____ _____ Dollars and <u>zero</u> Cents (\$ <u>1.00</u> )	\$ <u>200,000</u>
0970007	1500 HR.	Traffic Person (Uniformed Flagger), per Hour \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0971001A	1 L.S.	Maintenance and Protection of Traffic, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0975004	1 L.S.	Mobilization and Project Close Out, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0977001	50 EA.	Traffic Cone, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0978002	30 EA.	Traffic Drum, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____



<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
0980020	1 L.S.	Construction Surveying, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0992086A	1 EA.	Drinking Fountain, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0992090A	30 EA.	Bench, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
0992103A	19 EA.	Trash Can, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1001002	5745 L.F.	Trench and Backfilling – Type I, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1002102	7 EA.	Light Standard Foundation – Type II, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1002103	99 EA.	Light Standard Foundation, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
1002201	1 EA.	Traffic Control Foundation – Span Pole, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1002203	10 EA.	Traffic Control Foundation – Pedestal – Type I, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1003585A	17 EA.	Decorative Light Pole with Single Luminaire, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1003586A	6 EA.	Decorative Light Pole with Twin Luminaires, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1003595A	7 EA.	Decorative Light Pole and Light Fixture (Street), per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1003901A	1 EA.	Remove and Relocate Photocell, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1005592A	19 EA.	LED Decorative Luminaire (Street), per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
1005593A	15 EA.	LED Upgrade Twin, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1005594A	42 EA.	LED Upgrade Single, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1008115	500 L.F.	2" Rigid Metal Conduit in Trench, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1008127A	8905 L.F.	2" Polyvinyl Chloride Conduit in Trench, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1008215A	1100 L.F.	2" Rigid Metal Conduit Under Roadway, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1010001	5 EA.	Concrete Handhole, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1010039A	112 EA.	Precast Polymer Concrete Handhole Type II, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
1012036A	21000 L.F.	#6 AWG Copper Conductor, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1012038A	7000 L.F.	#8 AWG Copper Conductor, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1015002	250 L.F.	No. 10 Bare Copper Grounding Conductor, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1102048A	10 EA.	8' Ornamental Aluminum Pedestal, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1103026	1 EA.	24' Steel Span Pole, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1103050A	1 L.S.	Paint Existing Decorative Light Pole, per Lump Sum  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1106003A	10 EA.	1 Way Pedestrian Signal Pedestal Mounted, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
1107011A	10 EA.	Accessible Pedestrian Signal and Detector (Type A), per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1108110A	2 EA.	Traffic Signal Controller, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1111201A	1 L.S.	Temporary Detection (Site No. 1), per Lump Sum  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1111202A	1 L.S.	Temporary Detection (Site No. 2), per Lump Sum  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1112284A	2 EA.	Vehicle Detection Monitor, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1112286A	2 EA.	360-Degree Camera Assembly, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1112287A	2 EA.	360-Degree Video Detection Processor, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
1113049	210 L.F.	2 Conductor No. 8 Cable, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1113102	1250 L.F.	5 Conductor No. 14 Cable, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1113103	515 L.F.	7 Conductor No. 14 Cable, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1113106	160 L.F.	12 Conductor No. 14 Cable, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1113725A	265 L.F	23 AWG 4 Twisted Pair Category 6 Cable, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1118012A	1 L.S	Removal and/or Relocation of Traffic Signal Equipment, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1118051A	1 L.S	Temporary Signalization (Site No. 1), per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
1118052A	1 L.S.	Temporary Signalization (Site No. 2), per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1131003A	2 EA.	Remote Control Changeable Message Sign, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1206022A	1 EA.	LOTICIP Project Sign, per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1206023A	1 L.S.	Removal and Relocation of Existing Signs, per Lump Sum \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1208931A	170 S.F.	Sign Face - Sheet Aluminum (Type IX Retroreflective Sheeting), per Square Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1208937A	250 S.F.	Sign Face - Sheet Aluminum (Type XI Retroreflective Sheeting), per Square Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1210101	5800 L.F.	4" White Epoxy Resin Pavement Markings, per Linear Foot \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____

<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
1210102	3885 L.F.	4" Yellow Epoxy Resin Pavement Markings, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1210105	700 S.F.	Epoxy Resin Pavement Markings, Symbols and Legends, per Square Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1210106	1600 L.F.	12" White Epoxy Resin Pavement Markings, per Linear Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1220027	150 S.F.	Construction Signs, per Square Foot  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1302061A	65 EA.	Adjust Gate Box (Water), per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1303189A	6 EA.	Reset Existing Fire Hydrant, per Each  \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____
1403010A	17 EA.	Manhole Frame and Cover (Sanitary Sewer), per Each \$ _____ _____ Dollars and _____ Cents (\$ _____)	\$ _____



<u>Item No.</u>	<u>Estimated Quantity</u>	<u>Brief Description: Unit or Lump Sum Bid in Both Words and Figures</u>	<u>Total in</u>
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**TOTAL AMOUNT OF BID:**

\_\_\_\_\_ **DOLLARS**

**AND** \_\_\_\_\_ **CENTS**  
**(\$ \_\_\_\_\_)**

**Amount in Figures**

**ITEM #0814009A —REMOVAL, TRANSPORT, CLEANING AND DELIVERY**

This work shall conform to Section 8.14 of the CTDOT Form 819 as supplemented by the following requirements:

**Materials:** All existing curbing which is deemed acceptable by the Town or the Town’s representative shall be used, including existing granite curb inlets for storm drainage. The stone curbing shall be cleaned and evaluated for reuse.

**Construction Methods:** The construction methods for this work shall meet the requirements of 8.13.03 for stone curbing, as supplemented by the following requirements: The existing curbing shall be removed with care to avoid damage and shall be temporarily stockpiled in a location to be determined by the Town. While stockpiled, the curb shall be cleaned with a pressure washer in order to achieve a uniform appearance. Once cleaned, the Town or the Town’s representative will evaluate the curb and determine if it can be reset within the project limits. If ordered, the Contractor shall transport the curb to a point or points on the project which will allow all the reset curbing to be installed. Curbing removed and not reset, that is deemed to be in good condition, shall be organized on pallets and shall remain the property of the Town and shall be transported to such points, adjacent to the work, as the Town may designate.

**PAY ITEM**

Removal, Transport, Cleaning and Delivery

**PAY UNIT**

LF

## **ITEM # 0914001A – METAL HANDRAIL WITH POWDERCOAT FINISH**

### **9.52.01—Description**

### **9.52.02—Materials**

### **9.52.03—Construction Methods**

### **9.52.04—Method of Measurement**

### **9.52.05—Basis of Payment**

**9.52.01—Description:** This work shall consist of the coordination and installation of the Metal Handrails in the locations and to the dimensions and details shown on the plans or as ordered and in accordance with these specifications.

### **9.52.02—Materials:**

**Metal Handrails:** Metal handrails to be factory fabricated and shall conform to Section 9.14 of the CTDOT Form 819.

**Metal Handrail Finish:** Finish as noted on detail and as described below. Metal handrails factory fabrication to include the following finish: hot-dip galvanizing, factory-applied polyamide epoxy powder primer, fluoropolymer urethane powder topcoat and Super Durable urethane powder anti-graffiti clear-coat for iron and steel fabrications. This system meets or exceeds the performance criteria for the AMMA 2003, AMMA 2004 and AMMA 2005 specifications.

- A. Submit a 3' long (minimum) section of fencing that includes (1) of every element detailed for review of quality and workmanship.
- B. **Hot-Dip Galvanizing:** For steel exposed to the elements, weather or corrosive environments and other steel indicated to be galvanized, provide coating for iron and steel fabrications applied by the hot-dip process. Galvanizing bath shall contain special high-grade zinc.
- C. **Prior to Galvanizing:** The steel shall be immersed in a flux solution (zinc ammonium chloride). The flux tank must be 12 to 14 Baumé density and contain less than 0.4 percent iron.
  - a. To provide the galvanized surface required, the following procedures shall be implemented:
    - i. A monitoring recorder shall be utilized and inspected regularly to observe any variances in the galvanizing bath temperature.
    - ii. The pickling tanks shall contain hydrochloric acid with an iron content less than 12 percent and zinc content less than 3 percent. Titrations shall be taken weekly at a minimum.
    - iii. All chemicals and zinc shall be tested at least once a week to determine compliance with ASTM standards. All testing shall be done using atomic absorption spectrometry or x-ray fluorescence (XRF) equipment at a lab in the galvanizing facility.
  - b. Galvanize materials in accordance with specified standards and this specification. The dry kettle process shall be used to eliminate any flux

inclusions on the surface of the galvanized material. The use of the wet kettle process is prohibited.

- c. Comply with ASTM A 123 for fabricated products and ASTM A 153 for hardware.
  - d. If required, plug vent holes after galvanizing and grind smooth.
  - e. Galvanized surface shall be prepared per SSPC SP2 or SP3 to provide a smooth surface removing all runs, drips or sags.
  - f. Galvanizing shall exhibit a rugosity (smoothness) of 16-25 microns or less when measured by a profilometer. This pertains to those elements that are less than 24 pounds per running foot.
  - g. Galvanized surfaces, that are to receive coatings, must be blasted per SSPC SP 16. The use of iron, steel shot, and aluminum oxide grit as a blast medium, and power wire brushes are not permitted.
- D. **Primer:** Provide factory-applied polyamide powder epoxy prime coat over metal that has been sandblasted per SSPC SP16.
1. Primer shall be a polyamide epoxy powder primer with 0 VOC.
  2. Apply primer within 12 hours after blasting at the same plant in a controlled environment meeting applicable environmental conditions and as recommended by the primer coating manufacturer. Cure schedule shall be as recommended by the manufacturer.
  3. Primer shall be applied at 1.8-3 mils DFT and certified OTC/VOC compliant and conform to EPA and local requirements.
  4. Primer shall meet or exceed the following performance criteria as stipulated by the coating manufacturer:
    - a. Cure Schedule: 10 min. at 400°F
    - b. Specific Gravity: 1.58 +/- .05 1.4-1.7 +/- .05
    - c. Coverage at 1.0 Mil 121.7 sq. ft./ lb.
    - d. 60° Gloss: 55-65 (ASTM D-523)
    - e. Adhesion: 5B (ASTM D-3359)
    - f. Flexibility: Pass 1/8 " Mandrel Bend (ASTM D-522)
    - g. Pencil Hardness: 2H-3H (ASTM D-3363)
    - h. Impact Resistance: 80 in-lbs direct (ASTM D-2794) 80 in-lb reverse
    - i. Typical Environmental Properties: On Bonderite 1000 Panels
    - j. Salt Fog 1000 hours (ASTM B-117)
    - k. Salt Fog (top-coated)\* 5000+ hours (ASTM B-117)
    - l. Humidity 1000 hours PASSED
- B. **Topcoat:** Provide fluoropolymer powder topcoat. Provide coating matching approved samples. Factory-applied metal coatings shall be applied in a facility acceptable to the coating manufacturer. Full cure of the coatings shall be verified by the coating manufacturer's recommended test methods.
1. Coatings must meet or exceed the criteria for the following categories as stipulated by the coating manufacturer. All testing must be on lab prepared panels.
    - a. Adhesion: ASTM D 3359, no loss.
    - b. Hardness: ASTM D 3363 (pencil), H min.
    - c. Falling Sand ASTM D 968 40L/mil.

- d. Salt Fog Resistance: ASTM B 117, passes 4000 hrs.
  - e. Humidity: ASTM D 2247, 4000 hours, few #8 blisters.
  - f. Impact Resistance (3mm): ASTM D 2794, no loss.
  - g. Color Retention: ASTM D 2244, 10 year less than or equal to 5 delta E.
  - h. Chalk Resistance: ASTM D 4214, #8 rating.
  - i. Gloss Retention: ASTM D 523, greater than or equal to 50 percent retention.
  - j. Erosion Resistance: ASTM B 244, less than 10 percent film loss.
  - k. Compliance: AAMA 2605.
- C. **Clearcoat:** Provide Super Durable powder urethane clearcoat in the gloss range specified.
1. Clearcoat shall be applied over the color coat per the manufacturer's recoat schedule at the same galvanizer's plant in a controlled environment meeting applicable environmental conditions as recommended by the coating manufacturer. Cure schedule shall be as recommended by the manufacturer.
  2. Clearcoat shall be applied at 2-3 mils DFT and certified OTC/VOC compliant and conform to EPA and local requirements.
  3. Clearcoat shall meet or exceed the following performance criteria as stipulated by the coating manufacturer:
    - a. Cure Schedule 10 min @400°F
    - b. Specific Gravity (g/ml): 1.17
    - c. Coverage at 1.0 Mil (ft<sup>2</sup>/lb) 165.2
    - d. 20° Gloss (ASTM D-523) 99
    - e. 60° Gloss (ASTM D-523) 110
    - f. Adhesion (ASTM D-3359) 5B
    - g. Flexibility: Pass 1/8 " Mandrel Bend (ASTM D-522)
    - h. Pencil Hardness: (ASTM D-3363) H-2H
    - i. Impact resistance ASTM D-2794) Direct 100 in-lbs Reverse 100 in-lbs
    - j. Humidity (ASTM D-4585) Slight gloss and color change
    - k. Salt Spray (ASTM B-117) Max 1/8" Creepage.

**Submittals:**

1. Shop or product drawings and product data shall be submitted for the following:
  - a. Metal Handrails: shop or product drawing, product data and 1'L min. sample portraying workmanship and finish.

**9.52.03—Construction Methods:**

**1. Metal Handrail:**

**Installation:** Install metal handrail by core drilling openings as required to a 6" minimum depth and set in non-shrink grout. Field welds to be ground smooth.

**Touch-Up and Repair:** For damaged and field-welded metal coated surfaces, clean welds, bolted connections and abraded areas the following procedures must be used.

- a. For galvanized surfaces, apply organic zinc repair paint complying with requirements of ASTM A 780, modified to 95 percent zinc in dry film. Galvanizing repair paint shall have 95 percent zinc by weight. Basis of design is ZIRP by Duncan Galvanizing. Thickness of applied galvanizing repair paint shall be not less than coating thickness required by ASTM A 123 or A 153 as applicable.
- b. For factory-applied finish coatings, field-touch-up shall be performed by qualified applicators with experience in the application of high-performance industrial coatings. All coating manufacturer’s requirements for mixing, application and environmental conditions must be followed. Touch-up shall be performed so that the repair is not visible from a distance of 6 feet. A touch-up repair kit and repair procedures shall be provided to the Owner for each type of factory-applied finish upon request.

**Warranty:**

- a. Warranty: Provide galvanizer’s standard warranty that materials will be free from 10 percent or more visible rust for 20 years.
- b. Warranty for the finish gloss and color shall be 10 years in accordance with the following performance specifications.
  - i. **Fade:** Loss of gloss shall not exceed 35 units of gloss which shall be measured in accordance with ASTM D 523-89 with 60 degree geometry.
  - ii. **Color Shift:** Shall not exceed 15 Delta E CIE LAB units for whites and light colors. Dark colors shall not exceed 25 Delta E CIE Lab units as measured by ASTM D 2244. (Yellows, Oranges and Reds are excluded.)

**9.52.04—Method of Measurement:** This work will be measured for payment by the actual number of completed and accepted handrails.

**9.52.05—Basis of Payment:** This work will be paid for at the Contract unit price per each “Metal Handrail with Powdercoat Finish” complete in place, and all other materials, equipment, tools, and labor incidental thereto.

Pay Item	Pay Unit
Metal Handrail with Powdercoat Finish	LF