

**SEPTEMBER 22, 2016**  
**BEAM END REPAIRS AND BEARING REPLACEMENT**  
**FOR BRIDGES IN DISTRICT 2**  
**FEDERAL AID PROJECT NO. 000R(916)**  
**STATE PROJECT NO. 0172-0447**  
**NORWICH, SPRAGUE, GRISWOLD**

**ADDENDUM NO. 1**

**SPECIAL PROVISIONS**

**NEW SPECIAL PROVISION**

The following Special Provision is hereby added to the Contract:

- NOTICE TO CONTRACTOR – BRIDGE 03434

**REVISED SPECIAL PROVISIONS**

The following Special Provisions are hereby deleted in their entirety and replaced with the attached like-named Special Provisions:

- SECTION 1.08 - PROSECUTION AND PROGRESS
- ITEM NO. 0020904A – LEAD COMPLIANCE FOR ABRASIVE BLAST CLEANING
- ITEM NO. 0603222A – DISPOSAL OF LEAD DEBRIS FROM ABRASIVE BLAST CLEANING

The Bid Proposal Form and Detailed Estimate Sheet are not affected by these changes.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.

09/12/2016

**NOTICE TO CONTRACTOR – BRIDGE 03434**

The Contractor is hereby notified Bridge 03434 must be complete in construction in calendar year 2017.

## **SECTION 1.08 - PROSECUTION AND PROGRESS**

### **Article 1.08.04 - Limitation of Operations - Add the following:**

In order to provide for traffic operations as outlined in the Special Provision "Maintenance and Protection of Traffic," the Contractor will not be permitted to perform any work which will interfere with the described traffic operations on all project roadways as follows:

#### **Route I-395, Route 138**

On the following State observed Legal Holidays:

New Year's Day  
Good Friday, Easter\*  
Memorial Day  
Independence Day  
Labor Day  
Thanksgiving Day\*\*  
Christmas Day

The following restrictions also apply:

On the day before and the day after any of the above Legal Holidays.

On the Friday, Saturday, and Sunday immediately preceding any of the above Holidays celebrated on a Monday.

On the Saturday, Sunday, and Monday immediately following any of the above Holidays celebrated on a Friday.

\* From 6:00 a.m. the Thursday before the Holiday to 8:00 p.m. the Monday after the Holiday.

\*\* From 6:00 a.m. the Wednesday before the Holiday to 8:00 p.m. the Monday after the Holiday.

#### **During all other times**

##### **Route I-395**

The Contractor shall maintain and protect traffic as shown on the accompanying "Limitation of Operations" charts, which dictate the minimum number of lanes that must remain open for each day of the week.

##### **Ramps and Turning Roadways**

The Contractor will not be allowed to interfere with traffic on:

6:00 AM to 900 AM Monday through Friday

3:30 PM to 6:00 PM Monday through Friday

10:00 AM and 6:00 PM Saturday and Sunday

**Bridge No. 00288 – Route 138 over I-395, Griswold**

The Contractor will not be allowed to interfere with traffic on the above noted roads on:

7:00 AM to 8:30 AM Monday through Friday

3:30 PM to 6:00 PM Monday through Friday

**Bridge No. 03434 – Route 97 over abandoned canal**

As part of project 133-97, (Bridge 01291 – Route 97 over Beaver Brook) traffic is detoured over Bridge No. 03434. Work on Bridge No. 03434 shall not take place while the above mentioned detour is in effect. Construction of Bridge 03434 must be complete in calendar year 2017. The construction of project 133-97 and detour of traffic over Bridge 03434 will occur during calendar year 2018.

**Bridge No. 01415 – Route 169 over Shetucket River**

The Connecticut State Firefighters Annual Parade is scheduled to take place on Sunday, September 17, 2017. The parade route is over Bridge No. 01415. The Contractor is to schedule his work so that no construction can occur on the date of the parade and no construction equipment can be located at this site on that date.

**All Other Roadways**

No daily restrictions.

**Additional Lane Closure Restrictions**

It is anticipated that work on adjacent projects will be ongoing simultaneously with this project. The Contractor shall be aware of those projects and anticipate that coordination will be required to maintain proper traffic flow at all times on all project roadways, in a manner consistent with these specifications and acceptable to the Engineer.

The Contractor will not be allowed to perform any work that will interfere with traffic operations on a roadway when traffic operations are being restricted on that same roadway, unless there is at least a one mile clear area length where the entire roadway is open to traffic or the closures have been

coordinated and are acceptable to the Engineer. The one mile clear area length shall be measured from the end of the first work area to the beginning of the signing pattern for the next work area.

Route: I-395 Northbound/Southbound Location: Norwich Between Exits 82 & 83 Number of Through Lanes: 2							
Hour Beginning	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Mid	1	1	1	1	1	1	1
1 AM	1	1	1	1	1	1	1
2 AM	1	1	1	1	1	1	1
3 AM	1	1	1	1	1	1	1
4 AM	1	1	1	1	1	1	1
5 AM	1	1	1	1	1	1	1
6 AM	E	E	E	E	E	1	1
7 AM	E	E	E	E	E	1	1
8 AM	E	E	E	E	E	1	1
9 AM	2	2	2	2	2	2	2
10 AM	2	2	2	2	2	2	2
11 AM	2	2	2	2	2	2	2
Noon	2	2	2	2	2	2	2
1 PM	2	2	2	2	2	2	2
2 PM	2	2	2	2	2	2	2
3 PM	E	E	E	E	E	2	2
4 PM	E	E	E	E	E	2	2
5 PM	E	E	E	E	E	2	2
6 PM	1	1	1	1	2	2	1
7 PM	1	1	1	1	1	1	1
8 PM	1	1	1	1	1	1	1
9 PM	1	1	1	1	1	1	1
10 PM	1	1	1	1	1	1	1
11 PM	1	1	1	1	1	1	1

**On Holidays and within Holiday Periods, all Hours shall be ‘E.’**

**‘E’ = maintain existing traffic operations = all available travel lanes, including exit only lanes, climbing lanes and all available shoulder widths shall be open to traffic during this period.**

Route: I-395 Northbound/Southbound Location: Griswold Bridge 00288 Number of Through Lanes: 2							
Hour Beginning	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Mid	1	1	1	1	1	1	1
1 AM	1	1	1	1	1	1	1
2 AM	1	1	1	1	1	1	1
3 AM	1	1	1	1	1	1	1
4 AM	1	1	1	1	1	1	1
5 AM	1	1	1	1	1	1	1
6 AM	E	E	E	E	E	1	1
7 AM	E	E	E	E	E	1	1
8 AM	E	E	E	E	E	1	1
9 AM	1	1	1	1	1	1	1
10 AM	1	1	1	1	1	1	1
11 AM	1	1	1	1	1	1	1
Noon	1	1	1	1	1	1	1
1 PM	1	1	1	1	1	1	1
2 PM	1	1	1	1	1	1	1
3 PM	E	E	E	E	E	1	1
4 PM	E	E	E	E	E	1	1
5 PM	E	E	E	E	E	1	1
6 PM	1	1	1	1	1	1	1
7 PM	1	1	1	1	1	1	1
8 PM	1	1	1	1	1	1	1
9 PM	1	1	1	1	1	1	1
10 PM	1	1	1	1	1	1	1
11 PM	1	1	1	1	1	1	1

**On Holidays and within Holiday Periods, all Hours shall be ‘E.’**

**‘E’ = maintain existing traffic operations = all available travel lanes, including exit only lanes, climbing lanes and all available shoulder widths shall be open to traffic during this period.**

## **ITEM 0020904A – LEAD COMPLIANCE FOR ABRASIVE BLAST CLEANING**

### **Description:**

Work under this item shall include the special handling measures and work practices required for abrasive and/or water blast cleaning activities, principally involved in bridge coating removal/painting operations, which impact materials containing or covered by lead paint. Lead paint includes paint found to contain **any** detectable amount of lead by Atomic Absorption Spectrophotometry (AAS) or X-Ray Fluorescence (XRF).

All activities shall be performed in accordance with the OSHA Lead in Construction Regulations (29 CFR 1926.62), the USEPA RCRA Hazardous Waste Regulations (40 CFR Parts 260 through 274), the CTDEEP Hazardous Waste Regulations (RCSA 22a-209-1 and 22a-449(c)), and SSPC Guide 6 – Guide for Containing Debris Generated During Paint Removal Operations.

All activities shall be performed by individuals with appropriate levels of OSHA lead awareness and hazard communication training, supervised at all times by the Contractor's Competent Person, and periodically inspected by personnel working for an industrial hygiene firm (IH firm), retained by the Contractor, under the direct supervision of a Certified Industrial Hygienist (CIH). Periodic inspections shall be conducted at least weekly while work impacting lead is occurring, but shall be as frequent as necessary to maintain Contractor compliance with the OSHA Lead Construction Standards. The Contractor's Competent Person shall be on-site at all times that the work impacting lead is being performed and shall be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, and has authorization to take prompt corrective measures to eliminate them.

Deviations from these Specifications require the written approval of the Engineer.

### **Materials:**

All materials shall be delivered to the job site in the original packages, containers, or bundles bearing the name of the manufacturer, the brand name and product technical description, with MSDS sheets as applicable.

No damaged or deteriorating materials shall be used. If material becomes contaminated with lead, the material shall be decontaminated or disposed of as lead-containing waste material. The cost to decontaminate and dispose of this material shall be at the expense of the Contractor.

The following material requirements are to be met if to be used during the work:

Fire retardant polyethylene sheet shall be in roll size to minimize the frequency of joints, with factory label indicating minimum six (6) mil thickness.

Polyethylene disposable bags shall be minimum six (6) mils thick.

Tape (or equivalent product) capable of sealing joints in adjacent polyethylene sheets and for the attachment of polyethylene sheets to finished or unfinished surfaces must be capable of adhering under both dry and wet conditions.

Cleaning Agents and detergent shall be lead specific, such as TriSodium Phosphate (TSP).

Labels and warning signs shall conform to 29 CFR 1926.62, 40 CFR 260 through 274 and 49 CFR 172 as appropriate.

Air filtration devices and vacuum units shall be equipped with High-Efficiency Particulate Air (HEPA) filters.

### **Construction Methods:**

#### **(1) Pre-Abatement Submittals and Notices**

A. Prior to the start of **any** work that will generate hazardous lead waste above conditionally exempt small quantities (greater than 100 kg/month or greater than 1000 kg stored at any time), the Contractor shall obtain from the Engineer on a contiguous per site basis a temporary EPA Hazardous Waste Generators ID number, in accordance with Item 0603222A Disposal of Lead Debris from Abrasive Blast Cleaning, unless otherwise directed by the Engineer. Temporary EPA ID numbers are good for six months from the date they are issued and can be extended once, for a maximum of six months and can't be used for longer than one year. The Contractor will be responsible for notifying the Engineer when an extension is needed.

B. Fifteen (15) working days prior to beginning work that impacts lead paint, the Contractor shall submit four copies of each of the following to the Engineer:

1. A written site-specific Lead Compliance Plan, prepared and stamped by a Certified Industrial Hygienist (CIH), that covers all workers on the project (Contractor, Subcontractor and ConnDOT representatives). The Lead Compliance Plan shall be prepared in accordance with 29 CFR 1926.62(e), and shall include: descriptions of each activity impacting lead; procedures for engineering, work practice, and administrative controls to be employed; daily on-site job-site inspections by the Competent Person; periodic on-site inspections by IH firm personnel (describe frequency and inspection criteria); hazard communication/training; medical surveillance; biological monitoring; exposure assessment air monitoring; personal protective equipment (PPE); respiratory protection; housekeeping; decontamination; procedures for waste containment, storage, handling and disposal; contents of the job completion close-out report; and all other procedures that may be necessary to comply with 29 CFR 1926.62 and 40 CFR 260 – 274.

2. Copies of all employee certificates, dated within the previous twelve (12) months, relating to OSHA lead awareness and hazard communication training and training in the use of lead-safe work practices. SSPC training programs, such as SSPC C-5 Deleading of Industrial Structures may be accepted as meeting these requirements if it can be demonstrated that such training addressed all required OSHA topics.

This information shall be updated and resubmitted annually, or as information changes, for the duration of lead removal work in order to verify continued compliance.

3. Name and qualifications of Contractor's OSHA Competent Person, as defined under 29 CFR 1926.62, who will be on-site at all times that the work impacting lead paint is being performed.
4. Name and qualifications of IH firm personnel that will be performing the periodic on-site inspections. Such personnel shall work under the direct supervision of the CIH that stamped the Lead Compliance Plan and have training within the previous twelve (12) months for OSHA lead awareness and the use of lead-safe work practices or equivalent. Such personnel shall also have a minimum of two years work experience related to the OSHA Lead in Construction Standard and be capable of recognizing the hazards associated therewith.
5. Documentation from the Contractor, typed on company letterhead and signed by the Contractor, certifying that all employees listed therein have received the following, and are medically fit to perform the work impacting lead:
  - a. medical monitoring within the previous twelve (12) months, as required in 29 CFR 1926.62;
  - b. biological monitoring within the previous six (6) months, as required in 29 CFR 1926.62;
  - c. respirator fit testing within the previous twelve (12) months, as required in 29 CFR 1910.134 (for those who don a tight-fitting face piece respirator)

This information shall be updated and resubmitted every 6 months, or as information changes, for the duration of lead removal work in order to verify continued compliance.

6. Names of the proposed non-RCRA, non-hazardous lead debris waste disposal facility.
7. Names of the proposed scrap metal recycling facilities. The Contractor shall submit to the Engineer all documentation necessary to demonstrate the selected facility is able to accept lead-painted metal.
8. Negative exposure assessments conducted within the previous 12 months documenting that employee exposure to lead for each task is below the OSHA Action

Level of  $30 \mu\text{g}/\text{m}^3$ . If a negative exposure assessment has not been conducted, the Contractor shall submit its air monitoring program for the work tasks as part of the Lead Compliance Plan. Until a negative exposure assessment is developed for each task impacting lead paint, the Contractor shall ensure that all workers and authorized person entering the Regulated Area wear protective clothing and respirators in accordance with OSHA 29 CFR 1926.62.

No activity shall commence until all required submittals have been received and found acceptable to the Engineer. Those employees added to the Contractor's original list will be allowed to perform work only upon submittal of acceptable documentation to, and review by, the Engineer.

Contractor shall provide the Engineer with a minimum of 48 hours notice in advance of scheduling, changing or canceling work activities.

## **(2) Lead Abatement Provisions**

### **A. General Requirements:**

All employees of the Contractor who perform work impacting lead paint shall be properly trained to perform such duties. In addition, the Contractor shall instruct all workers in all aspects of personnel protection, work procedures, emergency evacuation procedures and use of equipment including procedures unique to this project.

Contractor shall provide all labor, materials, tools, equipment, services, testing, and incidentals which are necessary or required to perform the work in accordance with applicable governmental regulations, industry standards and codes, and these Specifications.

Prior to beginning work, the Engineer and Contractor shall perform a visual survey of each work area and review conditions.

As necessary, the Contractor shall:

Shut down and lock out electrical power, including all receptacles and light fixtures, where feasible. The use or isolation of electrical power will be coordinated with all other ongoing uses of electrical power at the site.

Coordinate all power and fire alarm isolation with the appropriate representatives.

If adequate electrical supply is not available at the site, the Contractor shall supply temporary power. Such temporary power shall be sufficient to provide adequate lighting and power the Contractor's equipment. The Contractor is responsible for proper connection and installation of electrical wiring and shall ensure safe installation of electrical equipment in compliance with applicable electrical codes and OSHA requirements.

If water is not available at the site for the Contractor's use, the Contractor shall supply sufficient water for each shift to operate the wash facility/decontamination shower units in addition to the water needed at the work area.

The Engineer may provide a Project Monitor to monitor compliance of the Contractor and protect the interests of the Department. In such cases, no activity impacting lead paint shall be performed until the Project Monitor is on-site. Environmental sampling, including ambient air sampling, TCLP waste stream sampling, and dust wipe sampling, will be conducted by the State as it deems necessary throughout the project. Any Project Monitor provided by the Engineer is supplementary to the requirement for the Contractor to have periodic inspections performed at a frequency to ensure/document Contractor compliance with the regulations and the requirements of the Contractor's Lead Compliance Plan. Air monitoring to comply with the Contractor's obligations under OSHA remains solely responsibility of the Contractor.

If at any time, procedures for engineering, work practice, administrative controls or other topics are anticipated to deviate from those documented in the submitted and accepted Lead Compliance Plan, the Contractor shall submit a modification of its existing plan for review and acceptance by the Engineer prior to implementing the change.

If air samples collected outside of the Regulated Area during activities impacting lead paint indicate airborne lead concentrations greater than original background levels or  $30 \text{ ug/m}^3$ , whichever is larger, or if at any time visible emissions of lead paint extend out from the Regulated Area, an examination of the Regulated Area shall be conducted and the cause of such emissions corrected. Cleanup of surfaces outside the Regulated Area using HEPA vacuum equipment or wet cleaning techniques shall be done prior to resuming work.

Work outside the initial designated area(s) will not be paid for by the Engineer. The Contractor will be responsible for all costs incurred from these activities including repair of any damage.

## B. Regulated Area

The Contractor shall establish a Regulated Area through the use of appropriate barrier tape or other means to control unauthorized access into the area where activities impacting lead paint are occurring. Warning signs meeting the requirements of 29 CFR 1926.62 shall be posted at all approaches to Regulated Areas. These signs shall read:

**DANGER  
LEAD WORK AREA  
MAY DAMAGE FERTILITY OR THE UNBORN CHILD  
CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM  
DO NOT EAT, DRINK, OR SMOKE IN THIS AREA**

The Contractor shall also implement appropriate engineering controls including a full negative pressure enclosure, in accordance with Item 0603XX1A – Class I Containment & Collection of Surface Prep Debris, and wet dust suppression methods, etc. as necessary, and as approved by

the Engineer, to prevent the spread of lead contamination beyond the Regulated Area in accordance with the Contractor's approved Lead Compliance Plan. Should the previously submitted plan prove to be insufficient to contain the contamination, the Contractor shall modify its plan and submit it for review by the Engineer.

Any air exhausted from the containment enclosure, abrasive-recycling equipment or vacuum equipment shall be passed through a HEPA filtering system. The Contractor is responsible for the design, effectiveness and maintenance of this filtering system. No discharge of debris dust shall be allowed.

#### C. Wash Facilities:

The Contractor shall provide handwash facilities in compliance with 29 CFR 1926.51(f) and 29 CFR 1926.62 regardless of airborne lead exposure.

If employee exposure to airborne lead exceeds the OSHA Permissible Exposure Limit of 50 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ), shower rooms must be provided. The Shower Room shall be of sufficient capacity to accommodate the number of workers. One shower stall shall be provided for each eight (8) workers. Showers shall be equipped with hot and cold or warm running water. Shower water shall be collected and filtered using best available technology and disposed of in accordance with all Federal, State and local laws, regulations and ordinances.

#### D. Personal Protection:

The Contractor shall initially determine if any employee performing construction tasks impacting lead paint may be exposed to lead at or above the OSHA Action Level of  $30 \mu\text{g}/\text{m}^3$ . Assessments shall be based on initial air monitoring results as well as other relevant information. The Contractor may rely on historical air monitoring data obtained within the past 12 months under workplace conditions closely resembling the process, type of material, control methods, work practices and environmental conditions used and prevailing in the Contractor's current operations to satisfy the exposure assessment requirements. Monitoring shall continue as specified in the OSHA standard until a negative exposure assessment is developed.

Until a negative exposure assessment is developed for each task impacting lead paint, the Contractor shall ensure that all workers and authorized person entering the Regulated Area wear protective clothing and respirators in accordance with OSHA 29 CFR 1926.62. Protective clothing shall include impervious coveralls with elastic wrists and ankles, head covering, gloves and foot coverings. Sufficient quantities shall be provided to last throughout the duration of the project.

Protective clothing provided by the Contractor and used during chemical removal operations shall be impervious to caustic materials. Gloves provided by the Contractor and used during chemical removal shall be of neoprene composition with glove extenders.

Respiratory protective equipment shall be provided and selection shall conform to 42 CFR Part 84, 29 CFR Part 1910.134, and 29 CFR Part 1926.62. A formal respiratory protection program must be implemented in accordance with 29 CFR Part 1926.62 and Part 1910.134.

#### E. Air Monitoring Requirements

The Contractor shall:

1. Provide air monitoring equipment including sample filter cassettes of the type and quantity required to properly monitor operations and personnel exposure surveillance throughout the duration of the project.
2. Conduct initial exposure monitoring to determine if any employee performing construction tasks impacting lead paint may be exposed to lead at or above the OSHA Action Level of 30 micrograms per cubic meter. Monitoring shall continue as specified in the OSHA standard until a negative exposure assessment is developed.
3. Conduct personnel exposure assessment air sampling, as necessary, to assure that workers are using appropriate respiratory protection in accordance with OSHA Standard 1926.62 or the approved Lead Compliance Plan. Documentation of air sampling results must be recorded at the work site within twenty-four (24) hours and shall be available for review until the job is complete.

#### F. Periodic Inspections

The Contractor shall retain the services of IH firm personnel, working under the direct supervision of the CIH that stamped the Lead Compliance Plan, to perform periodic inspections of the job site work practices and engineering controls, on a frequency to ensure/document Contractor compliance with the regulations. Periodic inspections shall be performed at least weekly while work impacting lead is occurring, but shall be at the frequency necessary to maintain Contractor compliance with the OSHA Lead in Construction Standard. Any exceptions to 29 CFR 1926.62 or the accepted Lead Compliance Plan shall be reported to the Contractor and the Engineer prior to the IH firm personnel leaving the site and corrected immediately.

All findings of such periodic inspections shall be documented in writing to the Engineer no later than 10 days following the site visit. At a minimum, the inspection report shall document the following:

1. Description of current work activities
2. Description of engineering controls being implemented
3. Description of PPE being utilized
4. Description of visual review of containment system effectiveness
5. Results of all air sampling received since date of last report
6. Narrative interpreting sample results and making recommendations as necessary
7. Description of waste management practices being utilized

## 8. Descriptions of exceptions noted and corrective action taken

The report shall include a signature from the IH firm employee that performed the site inspection verifying that the Contractor's work practices are in compliance with 29 CFR 1926.62 and the previously submitted and accepted Lead Compliance Plan. The CIH shall sign verifying their concurrence.

### G. Lead Abatement Procedures

The Contractor's Competent Person shall be at the job site at all times during work impacting lead.

Work impacting lead paint shall not begin until authorized by the Engineer, following a pre-work visual inspection by the Project Monitor or Engineer to verify existing conditions.

Any activity impacting lead painted surfaces shall be performed in a manner which minimizes the spread of lead dust contamination and generation of airborne lead.

**The Contractor shall conduct exposure assessments for all tasks which impact lead paint in accordance with 29 CFR 1926.62(d) and shall implement appropriate personal protective equipment until negative exposure assessments are developed.**

**All abrasive and/or water blast cleaning work impacting the lead containing/coated materials shall be conducted within an established Regulated Area with a remote wash facility/decontamination system in accordance with "C. Wash Facilities" and the OSHA Lead in Construction Standard. In accordance with 29 CFR 1926.62, engineering controls and work practices shall be utilized to prevent the spread of lead dust and debris beyond the Regulated Area and limit the generation of airborne lead. Such engineering controls shall include the use of a full negative pressure enclosure (NPE) in accordance with SSPC Guide 6 and Item 0603XXXA Class I Containment & Collection of Surface Prep Debris. All wastes containing lead paint shall be properly contained and secured for storage, transportation and disposal.**

The Contractor shall ensure proper entry and exit procedures for workers and authorized persons who enter and leave the Regulated Area. All workers and authorized persons shall leave the Regulated Area and proceed directly to the wash or shower facilities where they will HEPA vacuum gross debris from work suit, remove and dispose of work suit, wash and dry face and hands, and vacuum clothes. Lead chips and dust must not be removed by blowing or shaking of clothing. Wash water shall be collected, filtered, and disposed of in accordance with Federal, State and local water discharge standards. Any permit required for such discharge shall be the responsibility of the Contractor.

No one shall eat, drink, smoke, chew gum or tobacco, or apply cosmetics while in the Regulated Area.

Data from the limited lead testing performed by the Engineer is documented in the reports listed in the “Notice to Contractor – Hazardous Materials Investigations” or is presented herein. Under no circumstances shall this information be the sole means used by the Contractor for determining the extent of lead painted materials. The Contractor shall be responsible for verification of all field conditions affecting performance of the work as described in these Specifications in accordance with OSHA, USEPA, USDOT and CTDEP standards. Compliance with the applicable requirements is solely the responsibility of the Contractor.

**Bridge No. 00278, Scotland Road over I-395, Norwich**

- **Lead based paint was identified on the painted metal surfaces of Bridge No. 00278.**

<b>Girders, Cross Beams, Beam Ends, Bearings, Rockers, Diaphragms, Connection plates, etc</b>	<b>Metal</b>	<b>Grey/Silver</b>	<b>14% by weight</b>
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- **TCLP waste stream sampling/analysis of the paint associated with the structural steel bridge surfaces characterized the paint waste as RCRA/CTDEEP hazardous waste.**

<b>Paint debris</b>	<b>130 mg/l</b>
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**Bridge No. 00279, Lawler Lane over I-395, Norwich**

- **Lead based paint was identified on the painted metal surfaces of Bridge No. 00279.**

<b>Girders, Cross Beams, Beam Ends, Bearings, Rockers, Diaphragms, Connection plates, etc</b>	<b>Metal</b>	<b>Grey/Silver</b>	<b>10% by weight</b>
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- **TCLP waste stream sampling/analysis of the paint associated with the structural steel bridge surfaces characterized the paint waste as RCRA/CTDEEP hazardous waste.**

<b>Paint debris</b>	<b>180 mg/l</b>
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**Bridge No. 00288, Route 138 over I-395, Griswold**

- **Lead based paint was identified on the painted metal surfaces of Bridge No. 00288.**

<b>Girders, Cross Beams, Beam Ends, Bearings, Rockers, Diaphragms, Connection plates, etc</b>	<b>Metal</b>	<b>Red</b>	<b>14% by weight</b>
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- **TCLP waste stream sampling/analysis of the paint associated with the structural steel bridge surfaces characterized the paint waste as RCRA/CTDEEP hazardous waste.**

<b>Paint debris</b>	<b>310 mg/l</b>
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**Bridge No. 01415, Route 169 over Shetucket River, Norwich**

- **Lead based paint was identified on the painted metal surfaces of Bridge No. 01415.**

<b>Girders, Cross Beams, Beam Ends, Bearings, Rockers, Diaphragms, Connection plates, etc</b>	<b>Metal</b>	<b>Green</b>	<b>16% by weight</b>
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- **TCLP waste stream sampling/analysis of the paint associated with the structural steel bridge surfaces characterized the paint waste as RCRA/CTDEEP hazardous waste.**

<b>Paint debris</b>	<b>15 mg/l</b>
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**Bridge No. 03434, Route 97 over Abandoned Canel, Sprague**

- **Lead based paint was identified on the painted metal surfaces of Bridge No. 03434.**

<b>Girders, Cross Beams, Beam Ends, Bearings, Rockers, Diaphragms, Connection plates, etc</b>	<b>Metal</b>	<b>Grey/Silver</b>	<b>32% by weight</b>
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- **TCLP waste stream sampling/analysis of the paint associated with the structural steel bridge surfaces characterized the paint waste as RCRA/CTDEEP hazardous waste.**

<b>Paint debris</b>	<b>100 mg/l</b>
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**At Bridge No. 01415, water blast cleaning techniques which are utilized on surfaces coated with lead paint must be conducted in accordance with the OSHA worker protection and USEPA RCRA/CTDEEP waste disposal standards, and shall be conducted in accordance with Item # 0603973A – HRCSA Corrosion Protection System procedures.**

**At Bridge Nos. 00278, 00279, 00288 & 03434, abrasive blast cleaning techniques which are utilized on surfaces coated with lead paint must be conducted in accordance with the OSHA worker protection and USEPA RCRA/CTDEEP waste disposal standards, and shall be conducted in accordance with Item # 0603XXXXA – Abrasive Blast Cleaning and Field Painting of Beam Ends (Site No. X) following SSPC-SP10 “Near White Blast Cleaning” procedures.**

**At Bridge Nos. 00278, 00279, 00288, 01415 & 03434, the Engineer has previously characterized the projected paint debris associated with the structural steel/metal bridge components as RCRA/CTDEEP Hazardous waste, which shall be handled and disposed of in accordance with USEPA/CTDEEP Hazardous Waste Regulations and Item 0603222A – Disposal of Lead Debris from Abrasive Blast Cleaning, or as applicable to Bridge No. 01415 where water blast cleaning is to be utilized and liquid waste is to be generated, Item 0603973A – HRCSA Corrosion Protection System.**

**Any scrap metal components generated shall be segregated and recycled as scrap metal at the Contractor’s previously submitted scrap metal recycling facility. The recycling of scrap metal (regardless of lead paint concentration) is exempt from USEPA RCRA and CTDEEP Hazardous Waste Regulation.**

Should lead contamination be discovered outside of the Regulated Area, the Contractor shall immediately stop all work in the Regulated Area, eliminate causes of such contamination and take steps to decontaminate non-work areas.

**H. Prohibited Removal Methods:**

The use of sand, steel grit, air, CO<sub>2</sub>, baking soda, or any other blasting media to remove lead or lead paint without the use of a HEPA ventilated contained negative pressure enclosure is prohibited.

Power/pressure washing shall not be used to remove lead paint, except when specified and performed in accordance with Item 0603973A – HRCSA Corrosion Protection System.

Compressed air shall not be utilized to remove lead paint, but can be used as a drying technique following removal of lead paint in accordance with Item 0603973A – HRCSA Corrosion Protection System.

Power tool assisted grinding, sanding, cutting, or wire brushing of lead paint without the use of cowed HEPA vacuum dust collection systems is prohibited.

Lead paint burning, busting of rivets painted with lead paint, welding of materials painted with lead paint, and torch cutting of materials painted with lead paint is prohibited. Where cutting, welding, busting, or torch cutting of materials is required, lead paint in the affected area must be removed first.

Chemical stripping of coatings from bridge components is prohibited.

#### I. Clean-up and Visual Inspection:

The Contractor shall remove and containerize all lead waste material and visible accumulations of debris, paint chips and associated items.

During clean-up the Contractor shall utilize HEPA filtered vacuum equipment.

The Engineer will conduct a visual inspection of the work areas in order to document that all surfaces have been maintained as free as practicable of accumulations of lead in accordance with 29 CFR 1926.62(h). If visible accumulations of waste, debris, lead paint chips or dust are found in the work area, the Contractor shall repeat the cleaning, at the Contractor's expense, until the area is in compliance. The visual inspection will detect incomplete work, damage caused by the abatement activity, and inadequate clean up of the work site.

All debris shall be contained and vacuum collected daily or more frequently as directed by the Engineer, due to debris buildup. Such debris, abrasive blast residue, rust and paint chips shall be stored in leakproof storage containers in the secured storage site, or as directed by the Engineer. The storage containers and storage locations shall be reviewed by the Engineer and shall be located in areas not subject to ponding.

All storage containers (roll offs or drums) shall have a protective liner and removable lid. These containers shall not have any indentations or damage that would allow seepage of the contained material.

If 55 gallon barrels are used, staging is required: 55 gallon barrels shall be stored together in two rows of five. The Contractor shall maintain a minimum lane clearance of 36 inches between each (barrel lot of ten).

The Contractor shall maintain a secure storage site, which shall be large enough to handle all debris. The Contractor shall store debris only in the secured storage site. During abrasive blast cleaning operations, all surface preparation debris shall be vacuum collected from the containment enclosure and removed to the abrasive recycling reclaimer unit, and the coating debris shall be conveyed to the secured storage site at the conclusion of the work shift. The Contractor shall account for all coating debris conveyed to the secured storage site and all coating debris transported from the project for disposal.

The secure storage site shall consist of an 8-ft. high fenced-in area with a padlocked entrance. Storage containers shall not be used on the project until and unless they have been reviewed and

approved by the Engineer. Storage containers and sites shall be located so as not to cause any traffic hazard. Container storage sites shall be in areas that are properly drained and runoff water shall not be allowed to pool and shall be out of the 100-year flood plain. The containers shall be placed on pallets or other approved material and not directly on the ground.

Storage containers shall be closed and covered with a waterproof tarpaulin at all times except during placement, sampling and disposal of debris.

#### J. Post-Work Regulated Area Deregulation:

Following an acceptable visual inspection, any engineering controls implemented may be removed.

A final visual inspection of the work area shall be conducted by the Competent Person and the Project Monitor or Engineer to ensure that all visible accumulations of suspect materials have been removed and that no equipment or materials associated with the lead paint removal remain. If this final visual inspection is acceptable, the Contractor will reopen the Regulated Area and remove all signage.

The Contractor shall restore all work areas and auxiliary areas utilized during work to conditions equal to or better than original. Any damage caused during the performance of the work activity shall be repaired by the Contractor at no additional expense to the State.

#### K. Waste Disposal/Recycling:

Non-metallic building debris waste materials tested and found to be non-hazardous Construction and Demolition (C&D) bulky waste shall be disposed of properly at a CTDEEP approved Solid Waste landfill.

Metallic debris shall be segregated and recycled as scrap metal at an approved metal recycling facility.

Hazardous lead debris shall be disposed of in accordance with Item 0603222A, Disposal of Lead Debris from Abrasive Blast Cleaning.

#### L. Project Closeout Data:

Provide the Engineer, within thirty (30) days of completion of the project site work, a compliance package; which shall include, but not be limited to, the following:

1. Competent persons (supervisor) job log;
2. Certification that all requirements of the Lead Compliance Plan and OSHA Lead in Construction Standards, including training, medical surveillance, biological monitoring and medical removal protection, have been followed;
3. Copies of each periodic inspection report;

4. Report on regulatory compliance prepared by the CIH based on the periodic inspections performed.
5. OSHA-compliant personnel air sampling data;
6. Completed waste shipment papers for non-hazardous lead construction and demolition (C&D) waste disposal or recycling and scrap metal recycling.

M. Non Compliance:

Failure of the Contractor to implement the requirements of 29 CFR 1926.62, its Lead Compliance Plan, or any other requirement of this item shall, at the sole discretion of the Engineer, result in the suspension of all Contract work until such deficiencies are corrected.

**Method of Measurement:**

This item will include all noted services, equipment, facilities, testing and other associated work, including up to three (3) ConnDOT project representatives. Services provided to any ConnDOT project representatives in excess of three (3) representatives will be measured for payment in accordance with Article 1.09.04 – “Extra and Cost-Plus Work.”

1-Within thirty (30) calendar days of the award of the Contract, the Contractor shall submit to the Engineer for acceptance a breakdown of its lump sum bid price for this item detailing:

- (a) The development costs associated with preparing the Lead Compliance Plan in accordance with these Specifications.
- (b) The cost per month for the duration of the Project to implement the Lead Compliance Plan and provide the services of the CIH and IH firm.

2-If the lump sum bid price breakdown is unacceptable to the Engineer; substantiation showing that the submitted costs are reasonable shall be required.

3-Upon acceptance of the payment schedule by the Engineer, payments for work performed will be made as follows:

- (a) The lump sum development cost will be certified for payment.
- (b) The Contractor shall demonstrate to the Engineer monthly that the Lead Compliance Plan has been kept current and is being implemented and the monthly cost will be certified for payment.
- (c) Any month where the Lead Compliance Plan is found not to be current or is not being implemented, the monthly payment for the Lead Compliance for Abrasive Blast Cleaning Item shall be deferred to the next monthly payment estimate. If the Lead Compliance Plan is not current or being implemented for more than thirty calendar days, there will be no monthly payment.

- (d) Failure of the Contractor to implement the Lead Compliance Plan in accordance with this Specification shall result in the withholding of all Contract payments.

**Basis of Payment:**

The lump sum price bid for this item shall include: services, materials, equipment, all permits, notifications, submittals, personal air sampling, personal protection equipment, incidentals, fees and labor incidental to activities impacting lead removal, treatment and handling of lead contaminated materials, and the transport and disposal of any non-RCRA, non-hazardous lead waste.

Final payment will not be made until all project closeout data submittals have been completed and provided to the Engineer. Once the completed package has been received in its entirety and accepted by the Engineer, final payment will be made to the Contractor.

<u>Pay Item</u>	<u>Pay Unit</u>
Lead Compliance for Abrasive Blast Cleaning	Lump Sum

END OF SECTION

## **ITEM 0603222A – DISPOSAL OF LEAD DEBRIS FROM ABRASIVE BLAST CLEANING**

### **Description:**

Work under this item shall include the handling, loading, packing, storage, transportation and final off-site disposal of hazardous lead debris which has been generated in conjunction with work conducted under Item 0020904A – Lead Compliance For Abrasive Blast Cleaning.

The Engineer previously analyzed a representative sample of the lead debris prior to generation and found leachable lead above RCRA-hazardous levels. A summation of the analytical results is included here:

<b><u>Site No.</u></b>	<b><u>TCLP Results</u></b>
<b>Bridge No. 00278 - Paint associated with the structural steel/metal bridge components</b>	<b>130 mg/l</b>
<b>Bridge No. 00279 - Paint associated with the structural steel/metal bridge components</b>	<b>180 mg/l</b>
<b>Bridge No. 00288 - Paint associated with the structural steel/metal bridge components</b>	<b>310 mg/l</b>
<b>Bridge No. 01415 - Paint associated with the structural steel/metal bridge components</b>	<b>15 mg/l</b>
<b>Bridge No. 03434 - Paint associated with the structural steel/metal bridge components</b>	<b>100 mg/l</b>

The Contractor shall comply with the latest requirements of the USEPA RCRA Hazardous Waste Regulations 40 CFR 260-274 and the DEEP Hazardous Waste Management Standards 22a-449(c).

**Hazardous lead debris shall be transported from the Project by a licensed hazardous waste transporter approved by the Department and disposed of at an EPA-permitted and Department-approved hazardous waste landfill within 90 days from the date of generation.**

The Contractor must use one or more of the following Department-approved disposal facilities for the disposal of hazardous waste:

Clean Earth of North Jersey, Inc., (CENJ) 115 Jacobus Avenue, South Kearny, NJ 07105 Phone: (973) 344-4004; Fax: (973) 344-8652	Clean Harbors Environmental Services, Inc. 2247 South Highway 71, Kimball, NE 69145 Phone: (308) 235-8212; Fax: (308) 235-4307
Clean Harbors of Braintree, Inc. 1 Hill Avenue, Braintree, MA 02184 Phone: (781) 380-7134; Fax: (781) 380-7193	Cycle Chem (General Chemical Corp.) 217 South First Street, Elizabeth, NJ 07206 Phone: (908) 355-5800; Fax (908) 355-0562

EnviroSafe Corporation Northeast (former Jones Environmental Services (NE), Inc.) 263 Howard Street, Lowell, MA 01852 Phone: (978) 453-7772; Fax: (978) 453-7775	Environmental Quality Detroit, Inc. 1923 Frederick Street, Detroit, MI 48211 Phone: (800) 495-6059; Fax: (313) 923-3375
Republic Environmental Systems 2869 Sandstone Drive, Hatfield, PA 19440 Phone: (215) 822-8995; Fax: (215) 997-1293	Northland Environmental, Inc. (PSC Environmental Systems) 275 Allens Avenue, Providence, RI 02905 Phone: (401) 781-6340; Fax: (401) 781-9710
Environmental Quality Company: Wayne Disposal Facility 49350 North I-94 Service Drive Belleville, MI 48111 Phone: (800) 592-5489; Fax: (800) 592-5329	

### Construction Methods:

#### A. Submittals

The Contractor shall submit in writing, (1) a letter listing the names of the hazardous waste disposal facilities (from the above list) that the Contractor will use to receive hazardous material from this Project, and (2) a copy of each facility's acceptance criteria and sampling frequency requirements.

No facility may be substituted for the one(s) designated in the Contractor's submittal without the Engineer's prior approval. If the material cannot be accepted by any of the Contractor's designated facilities, the Department will supply the Contractor with the name(s) of other acceptable facilities.

#### B. EPA ID Number:

**Prior to the generation of any hazardous waste on a contiguous per site basis**, the Contractor shall notify the Engineer of its selected hazardous waste transporter and disposal facility. The Contractor must submit to the Engineer (1) the transporter's current US DOT Certificate of Registration and (2) the transporter's current Hazardous Waste Transporter Permits for the State of Connecticut, the hazardous waste destination state and any other applicable states. The Engineer will then obtain on a contiguous per site basis a temporary EPA Generators ID number for the site that he will forward to the Contractor. Temporary EPA ID numbers are good for six months from the date they are issued and can be extended once, for a maximum of six months and can't be used for longer than one year. The Contractor will be responsible for notifying the Engineer when an extension is needed. Any changes in transporter or facility shall be immediately forwarded to the Engineer for review.

#### C. General:

Handling, storage, transportation and disposal of hazardous waste materials generated as a result of execution of this project shall comply with all Federal, State and Local regulations including

the USEPA RCRA Hazardous Waste Regulations (40 CFR Parts 260-271), the CTDEEP Hazardous Waste Regulations (22a-209 and 22a-449(c)), and the USDOT Hazardous Materials Regulations (49 CFR Part 171-180).

All debris shall be contained and collected daily or more frequently as directed by the Engineer, due to debris buildup. Debris shall be removed by HEPA vacuum collection. Such debris, abrasive blast residue, rust and paint chips shall be stored in leak-proof storage containers in the secured storage site, or as directed by the Engineer. The storage containers and storage locations shall be reviewed by the Engineer and shall be located in areas not subject to ponding.

All storage containers (roll offs or drums) shall have a protective liner and removable lid. These containers shall not have any indentations or damage that would allow seepage of the contained material.

If 55 gallon barrels are used, staging is required: 55 gallon barrels shall be stored together in two rows of five. The Contractor shall maintain a minimum lane clearance of 36 inches between each (barrel lot of ten).

The Contractor shall maintain a secure storage site, which shall be large enough to handle all debris. The Contractor shall store debris only in the secured storage site. All lead debris shall be conveyed to the secured storage site at the conclusion of the work shift. The Contractor shall account for all debris conveyed to the secured storage site and all debris transported from the project for disposal.

The secure storage site shall consist of an 8-ft. high fenced-in area with a padlocked entrance. Storage containers shall not be used on the project until and unless they have been reviewed and approved by the Engineer. Storage containers and sites shall be located so as not to cause any traffic hazard. Container storage sites shall be in areas that are properly drained and runoff water shall not be allowed to pool and shall be out of the 100-year flood plain. The containers shall be placed on pallets or other approved material and not directly on the ground.

Storage containers shall be closed and covered with a waterproof tarpaulin at all times except during placement, sampling and disposal of debris.

The Engineer previously analyzed a representative sample of the lead debris prior to generation and found leachable lead above RCRA-hazardous levels. A copy of the analytical results can be supplied to the Contractor at the time of waste disposal upon request.

Materials other than direct paint related debris which are incidental to the paint removal work activities (tarps, poly, plywood, PPE, gloves, decontamination materials, etc) which may be contaminated with lead, shall be stored separately from the direct paint debris, and shall be sampled by the Engineer for waste disposal characterization testing. Such materials characterized as hazardous shall be handled/disposed of as described herein, while materials characterized as non-hazardous shall be disposed of as non-hazardous CTDEEP Solid Waste under Item 0020904A.

Project construction waste materials unrelated to the paint removal operations shall NOT be combined/stored with paint debris waste and/or incidental paint removal materials as they are not lead contaminated and shall NOT be disposed of as hazardous waste. The Engineer's on-site Inspectors shall conduct inspections to verify materials remain segregated.

Hazardous waste materials are to be properly packed and labeled for transport by the Contractor in accordance with EPA, CTDEEP and USDOT regulations. The disposal of debris characterized as hazardous waste shall be completed within 90 calendar days of the date on which it began to be accumulated in the lined containers. Storage of containers shall be in accordance with current DEEP/EPA procedures.

The Contractor shall label containers with a 6-inch square, yellow, weatherproof, Hazardous Waste sticker in accordance with USDOT regulations.

The Contractor shall obtain and complete all paperwork necessary to arrange for material disposal, including disposal facility waste profile sheets. It is solely the Contractor's responsibility to co-ordinate the disposal of hazardous materials with its selected treatment/recycling/disposal facility(s). Upon receipt of the final approval from the facility, the Contractor shall arrange for the loading, transport and treatment/recycling/disposal of the materials in accordance with all Federal and State regulations. **No claim will be considered based on the failure of the Contractor's disposal facility(s) to meet the Contractor's production rate or for the Contractor's failure to select sufficient facilities to meet its production rate.**

The Contractor shall process the hazardous waste such that the material conforms with the requirements of the selected treatment/disposal facility, including but not limited to specified size and dimension. Refusal on the part of the treatment/disposal facility to accept said material solely on the basis of non-conformance of the material to the facility's physical requirements is the responsibility of the Contractor and no claim for extra work shall be accepted for reprocessing of said materials to meet these requirements.

All DOT shipping documents, including the Uniform Hazardous Waste Manifests utilized to accompany the transportation of the hazardous waste material shall be prepared by the Contractor and reviewed/signed by an authorized agent representing ConnDOT, as Generator, for each load of hazardous material that is packed to leave the site. The Contractor shall not sign manifests on behalf of the State as Generator. The Contractor shall forward the appropriate original copies of all manifests to the Engineer the same day the material leaves the Project site.

Materials not related to lead paint removal and/or characterized as non-hazardous waste shall NOT be shipped for hazardous waste disposal in accordance with USEPA RCRA hazardous waste minimization requirements.

A load-specific certificate of disposal, signed by the authorized agent representing the waste disposal facility, shall be obtained by the Contractor and promptly delivered to the Engineer for each load.

#### D. Material Transportation

Materials determined to be hazardous shall be transported in compliance with the applicable federal/state regulations. Transport vehicles shall have a protective liner and removable lid, shall not have any indentations or damage and must be free from leaks, and discharge openings must be securely closed during transportation.

In addition to all pertinent Federal, State and local laws or regulatory agency polices, the Contractor shall adhere to the following precautions during the transport of hazardous materials off-site:

- All vehicles departing the site are to be properly logged to show the vehicle identification, driver's name, time of departure, destination, and approximate volume, and contents of materials carried. Vehicles shall display the proper USDOT placards for the type and quantity of waste;
- No materials shall leave the site unless a disposal facility willing to accept all of the material being transported has agreed to accept the type and quantity of waste;
- Documentation must be maintained indicating that all applicable laws have been satisfied and that the materials have been successfully transported and received at the disposal facility; and,
- The Contractor shall segregate the waste streams (i.e. concrete, wood, etc.) as directed by the receiving disposal facility.

Any spillage of debris during disposal operations during loading, transport and unloading shall be cleaned up in accordance with EPA 40 CFR 265 Subparts C & D, at the Contractors expense.

The Contractor is liable for any fines, costs or remediation costs incurred as a result of their failure to be in compliance with this Item and all Federal, State and Local laws.

#### D. Equipment Decontamination:

All equipment shall be provided to the work site free of gross contamination. The Engineer may prohibit from the site any equipment that in his opinion has not been thoroughly decontaminated prior to arrival. Any decontamination of the Contractor's equipment prior to arrival at the site shall be at the expense of the Contractor. The Contractor is prohibited from decontaminating equipment on the Project that has not been thoroughly decontaminated prior to arrival.

The Contractor shall furnish labor, materials, tools and equipment for decontamination of all equipment and supplies that are used to handle Hazardous Materials. Decontamination shall be conducted at an area designated by the Engineer and shall be required prior to equipment and supplies leaving the Project, between stages of the work.

The Contractor shall use dry decontamination procedures. Residuals from dry decontamination activities shall be collected and managed as Hazardous Materials. If the results from dry methods are unsatisfactory to the Engineer, the Contractor shall modify decontamination procedures as required.

The Contractor shall be responsible for the collection and treatment/recycling/disposal of any liquid wastes that may be generated by its decontamination activities in accordance with applicable regulations.

#### E. Project Closeout Documents:

The Contractor shall provide the Engineer, within 30 days of completion of the work, a compliance package; which shall include, but not be limited to, the following:

1. Copies of completed Hazardous Waste Manifests (signed by authorized disposal facility representative)
2. Completed Waste Shipment Records/Bills of Lading (signed by authorized disposal facility representative)
3. Completed Weigh Bills (indicating each loads net weight).

#### Method of Measurement:

The work of "DISPOSAL OF LEAD DEBRIS FROM ABRASIVE BLAST CLEANING" shall be measured for payment as the actual net weight in tons delivered to the treatment/disposal facility. Such determinations shall be made by measuring each hauling vehicle on the permanent scales at the treatment/disposal facility. Total weight shall be the summation of weigh bills issued by the facility specific to this project and waste stream.

The disposal of any lead painted debris, originally anticipated to be hazardous, but determined by characterization sampling not to contain hazardous concentrations of lead will not be measured for payment under this Item. Disposal of these materials will be handled in accordance with the provisions of Item 0020904A.

The collection and treatment/disposal of materials and liquids generated during equipment decontamination activities and cleaning/disposal of personal protective equipment (PPE) shall be considered incidental to work under this Item and will not be measured for separate payment. Materials incidental to the construction, which become contaminated due to the lead debris removal, such as but not limited to, gloves, coveralls, tarps and filters shall be disposed of in accordance with this specification. These incidental materials shall be kept separate from the debris. These materials will not be measured for payment, but will be included in the general cost of the work.

**Basis of Payment:**

This work shall be paid for at the contract unit price per ton, which shall include the processing, loading, storage (including containers) and transportation of said materials from the temporary storage area to the final to the treatment/disposal facility; the treatment/disposal or recycling of said materials; the preparation of all related paperwork including manifests; fees; and all equipment, materials, tools, labor and work incidental to loading, transporting, treating/recycling and disposal of materials.

No separate payment shall be made under this Item for the on-site processing, transportation and treatment/disposal of materials not found to be hazardous based upon characterization sampling results.

No separate payment shall be made for the disposal of wastes generated in conjunction with equipment decontamination or the disposal of personal protective equipment (PPE). The cost of such disposal shall be considered incidental to the work under this Item.

Final payment will not be approved until completed copies of all Manifest(s) and Bills of Lading signed by an authorized disposal facility representative and all associated weight bills indicating each loads net weight have been provided to the Engineer. Once completed and facility-signed copies of all Manifest(s), Bills of Lading and associated weigh bills have been received in their entirety, the Engineer will review and approve the release of final payment to the Contractor.

Pay Item

Pay Unit

Disposal of Lead Debris from Abrasive Blast Cleaning

Ton