



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333-0016

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID A. COLE  
COMMISSIONER

January 16, 2009  
Subject: **Brunswick & Yarmouth**  
Federal Project Nos. IM-1264(400)E,  
BH-1560(200)X & BH-1561(200)X  
State Pin Nos. 012644.00, 015602.00,  
015612.00  
**Amendment No. 2**

Dear Sir/Ms:

Make the following changes to the Bid Documents:

In the Bid Book (page 23), **REMOVE** the "LOCATION MAP" for Durham Road Bridge, which gives the wrong location, and **REPLACE** it with the attached new "LOCATION MAP" for Durham Road Bridge

In the Bid Book (pages 44 through 59), **REMOVE** "SPECIAL PROVISION, SECTION 506, Lead Abatement and Coating Application", 16 pages dated December 24, 2008 and **REPLACE** it with the attached new "SPECIAL PROVISION, SECTION 506, Lead Abatement and Coating Application" 15 pages dated January 15, 2009.

In the Bid Book (pages 62 and 63), **REMOVE** "SPECIAL PROVISION, SECTION 652, MAINTENANCE OF TRAFFIC, (Traffic Control)", 2 pages and **REPLACE** it with the attached new "SPECIAL PROVISION, SECTION 652, MAINTENANCE OF TRAFFIC, (Traffic Control)", 3 pages undated.

The following question has been received:

**Question:** I have a question about the paint system for this job - Is it a Nepcoat A or B system? Also is there a pre bid meeting?

**Response:** Nepcoat B and there is no pre-bid meeting.

**Question:** Are the framing plans available for the subject bridges over I-295, Durham Road (012644.00), River Road (015602.00) and Bayview Street (015612.00)? Please advise if these framing plans can be provided to the bidders?

**Response:** The existing bridge plans will be posted to our web site this morning.



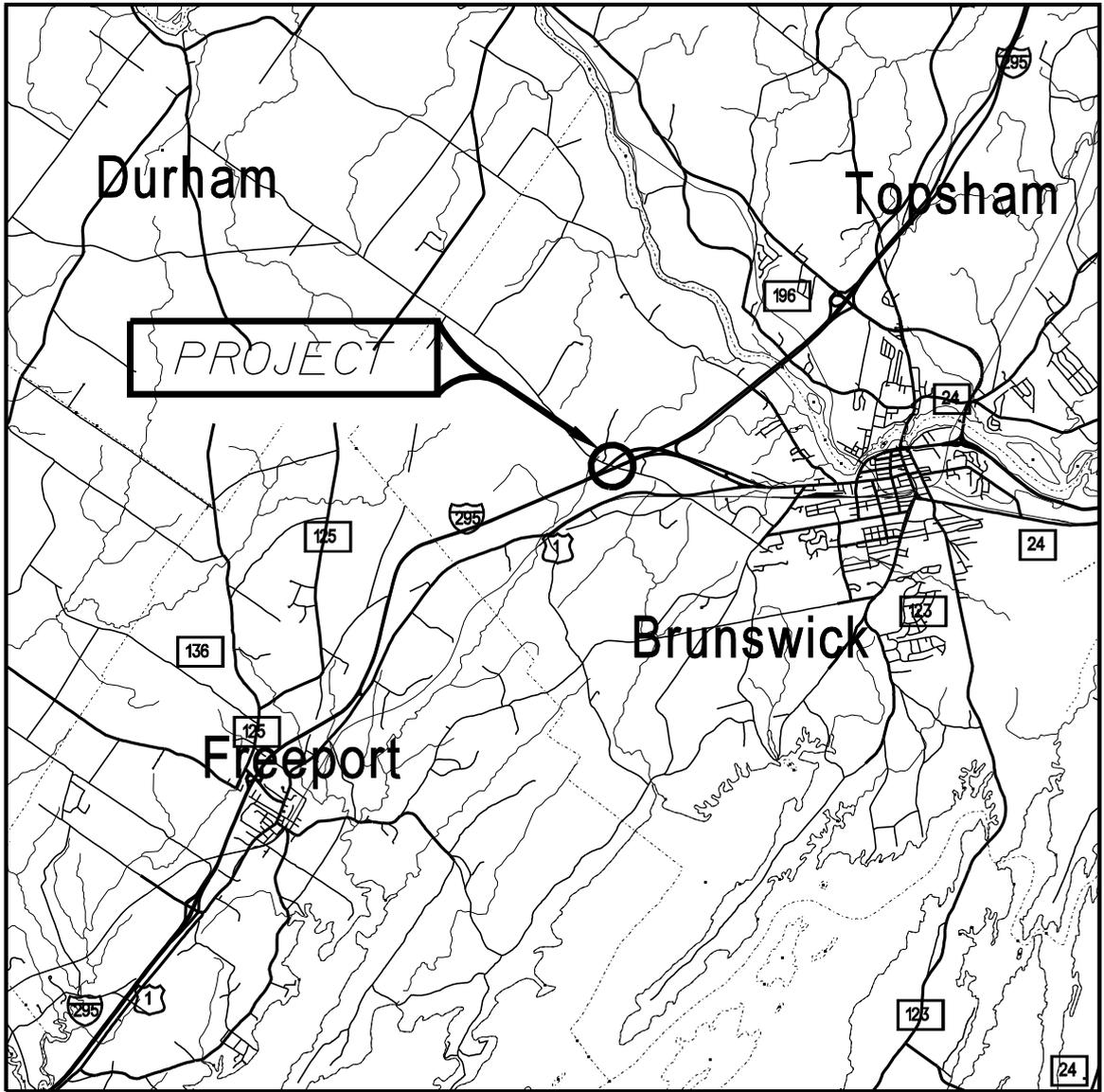
PRINTED ON RECYCLED PAPER

Consider this change prior to submitting your bid on January 21, 2009.

Sincerely,

Handwritten signature of Scott Bickford in black ink, followed by the initials "TBR".

Scott Bickford  
Contracts & Specifications Engineer



LOCATION MAP



Scale in Miles

<p>STATE OF MAINE DEPARTMENT OF TRANSPORTATION</p>	<p>DURHAM ROAD BRIDGE BRUNSWICK CUMBERLAND COUNTY</p>	<p>SHEET NUMBER <b>2</b></p>
<p>PROJECT NO. IM-1264(400)E PIN 12644.00 BRIDGE NO. 5685</p>	<p><b>LOCATION MAP</b></p>	<p>OF 5</p>

**SPECIAL PROVISION**  
**SECTION 506**  
**Lead Abatement and Coating Application**

506.01 Description This specification covers the field cleaning and painting of all existing structural steel. The work shall consist of furnishing all supervisory personnel, including competent person(s), labor, tools, equipment, containment, scaffolding, protection of public and private property, Quality Control activities, materials, and incidentals necessary for satisfactory completion of the Work. The areas to be cleaned and painted are as designated in the Contract for the following existing projects:

Brunswick-Durham Road Bridge (#5685) located over I-295  
Brunswick- River Road Bridge (# 6267) located over I-295  
Yarmouth- Bayview Street Bridge (#5835) located over I-295

506.02 General All existing structural steel requires the complete removal of existing rust, mill scale and coatings which may contain lead and hexavalent chromium. It is the responsibility of the Contractor to test the existing coating to determine the toxic metal content and, based on those results, design and implement the appropriate plans for containment, environmental protection, waste disposal and worker safety.

All existing structural steel shall be cleaned in accordance with SSPC-SP 10 and coated with a three coat paint system, chosen from the most recent North East Protective Coating (NEPCOAT) System B-Organic, Approved List. The list may be found on the NEPCOAT web page (<http://www.state.me.us/mdot/nepcoat/qualprod.htm>).

All Contractors and Subcontractors involved with the removal of lead based paint and the field application and touch-up of the designated coating systems shall have **SSPC-QP1 and QP2 certification** prior to Bid opening and shall keep this certification current throughout the duration of the Contract until Final Acceptance of the Work. Copies of valid current certifications for the Contractor and all Subcontractors shall be transmitted with the Bid package.

All lead abatement shall be in compliance with all applicable federal, state and local regulations, including the current OSHA 1926 Lead Health and Safety Standards.

In reference to surface preparation, cleanliness, coating application, containment measures and waste management, the Contractor shall have the latest copies of the following references on site at all times. These references are hereby made a part of the Contract:

- A. SSPC Steel Structures Painting Manual, Volumes 1 and 2 (Good Painting Practice and Systems and Specifications).
- B. SSPC Vis 1, Visual Standard for Abrasive Blast Cleaned Steel.
- C. SSPC Vis 3, Visual Standard for Power and Hand-Tool Cleaned Steel.

- D. SSPC Guide 6, Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations.
- E. SSPC Guide 7, Guide to the Disposal of Lead-Contaminated Surface Preparation Debris.
- F. Maine Department of Environmental Protection's *Hazardous Waste Management Rules*.
- G. Department of Environmental Protection's *Handbook for Hazardous Waste Generators*.

The Contractor shall supply the Resident with the applicable product data sheets and material safety data sheets (MSDS) before any coating work is performed. The Contractor shall also obtain from the manufacturer written procedures for touch-up including acceptable coating materials. If the coating manufacturer recommends a coating material for touch-up that is different from the coating material chosen by the Contractor, it will be supplied at no additional cost to the Department. The Contractor shall obtain in writing from the coating manufacturer, and provide to the Resident, a chart or table listing minimum and maximum recoat times for the primer and intermediate coat over the expected range of temperatures and relative humidity.

The primer color and the blasted steel shall be contrasting colors and the primer and intermediate color shall be contrasting colors. The finish topcoat color shall be green and match the required Federal Standard 595B, color number 14272.

506.03 Quality Control The Contractor is responsible for all aspects of the quality of the Work, including labor, equipment, materials, incidentals, processes, construction methods and Quality Control. Quality Control (QC) is the planned and specified actions or operations necessary to produce an end product that conforms to the requirements of the Contract and includes inspections and testing for process control to the extent determined necessary by the Contractor. All costs associated with QC activities shall be considered incidental to related Pay Items.

506.031 Submittals The Schedule of Work shall be in conformance with Standard Specification Section 107.4, Scheduling of Work, unless there is a Special Provision which supersedes the Standard Specification.

All Plans and submittals from the Contractor will be reviewed by the Department in accordance with Section 105.7, Working Drawings, of the Standard Specifications.

506.032 Quality Control Qualifications The Contractor shall provide QC personnel trained and certified by the National Association of Corrosion Engineers (NACE) or certified under the SSPC Bridge Coating Inspector (BCI) program. If the Contractor's QC personnel do not follow and enforce the approved Quality Control Plan, the Resident may require the Contractor to retain the services of an independent, third party certified NACE/SSPC BCI inspector for the remainder of the Project, at no additional cost to the Department. If the Resident determines that the Contractor is not performing the QC function properly, the Resident will issue the Contractor

a verbal warning. The second time the Resident finds that the QC function is being improperly performed, for the same reason, the Contractor will be given a written warning. The third time the Resident finds that the QC function is being improperly performed, for the same reason, the Contractor will be required to retain the services of a third party NACE/SSPC BCI certified inspector, at no additional cost to the Department. Discovery by the Department of a pattern of rework for the same items would be considered improper performance of the QC function.

506.033 Quality Control Plan The Contractor shall submit a QC Plan to the Department for review at least 21 days prior to the beginning of any removal of paint. The QC plan shall include: The names of all the Contractor's on-site representatives, including the NACE/SSPC BCI certified inspector, who will be responsible for the inspection and the acceptance of the Contractor's work; the definition of hold points, from pre-surface preparation inspection to final inspection; the format and submittal process for daily work reports and coating/DFT reports; and the process for rework. Violation of the QC Plan may result in a suspension of work. If the Department orders a suspension, in writing, work shall not resume until the Contractor provides a plan, which is acceptable to the Department, describing how compliance will be restored and maintained. A suspension resulting from the Contractor's failure to adhere to the QC Plan shall be considered an Inexcusable Delay.

506.034 Surface Preparation/Painting Plan The Contractor shall provide written procedures (preparation plan) for the surface preparation, the remediation of soluble salts, and coating application and repair. The plan shall include a description of the equipment that will be used for surface preparation and painting. The plan shall also identify the type and brand name of abrasive proposed for use; provide Material Safety Data (MSD) sheets for proposed abrasive. Also include the surface preparation methods and materials to be used in "sensitive areas", e.g. structural steel in close proximity to utilities, etc. If any of the areas that are determined to be sensitive by the Department are damaged due to improper surface preparation practices, the Contractor will be responsible for the repair of all damage at no additional cost to the Department. It is recommended that the Contractor explore alternative surface preparation methods for these "sensitive areas", such as power tool cleaning and the use of impregnated sponge and other less aggressive blast media. The Contractor shall receive approval from the Department before performing any removal methods when working in "sensitive areas".

The preparation plan shall identify the methods of protection or work isolation procedures that will be followed to protect surrounding structures, equipment, utility cables, etc. and property from exposure to surface preparation and paint debris. The Contractor is responsible for any damage caused by surface preparation.

All grease, oil, chlorides, ferrous salts and any other foreign matter must be removed prior to removal of any existing paint.

506.035 Containment Plan The Contractor shall provide a containment plan to the Department for review and acceptance prior to the erection of the containment system. The erection of containment enclosure(s), or conducting any paint disturbance activities, shall not

begin until review by the Department has been completed. Detailed drawings and structural analysis shall be prepared and stamped by a Professional Engineer (PE) licensed in the State of Maine. The Contractor is responsible for installing the containment per the Contract and the drawings provided by the Contractor's PE. The containment enclosure(s) will not be accepted by the Department until the Contractor's PE has field verified the proper installation of the containment enclosure(s). All surface preparation and painting shall be performed in the approved containment system, conforming to the latest SSPC Guide 6, Guide for Containing Debris Generated During Paint Removal Operations, for the specified level of cleaning, as applicable.

The Contractor is responsible for ensuring the containment meets all OSHA, federal and state regulations. Throughout the entire Project, work shall only be conducted within approved containment enclosures. The proposal shall be sufficiently detailed to show conformance with the requirements of SSPC Guide 6, Class 1A containment specifications. The Containment Plan shall also describe, in detail, the Contractor's methods of protecting the existing utilities, etc. All cables shall be protected such that no damage is done to the cables, equipment, etc. The Contractor shall be responsible for all damage incurred. The Containment Plan shall include the following information and requirements, at a minimum:

- A. Detailed drawings and structural analysis, prepared and stamped by a PE licensed in the State of Maine.
- B. Detailed calculations stamped by a PE registered in the State of Maine showing that the proposed paint containment system (enclosures, work platforms, collected waste product, equipment, etc.) will not produce stresses in any bridge members exceeding the allowable stresses as specified in AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications 2007 and 2008 interim specifications or AASHTO Standard Specifications for Highway Bridges 2002, and all supplementals thereto. An HS 20-44 loading shall be used for the live load.
- C. Detailed calculations stamped by a PE registered in the State of Maine showing that the loads applied to the existing structure(s) by wind forces on the containment enclosure(s) will not produce stresses in any bridge members exceeding the allowable stresses as specified in AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications 2007 and 2008 interim specifications or AASHTO Standard Specifications for Highway Bridges 2002, and all supplementals thereto. An HS 20-44 loading shall be used for the live load. The Contractor shall determine the wind speed above which damage to the existing structure(s) will result. If actual wind speeds exceed this design wind speed, the Contractor shall immediately make provisions to properly relieve the containment wind loading. The process for relieving the wind loading shall not release any of the lead paint waste. The Contractor may redesign/reconfigure the containment enclosure(s) or suspend operations until the actual wind speeds fall to levels below the design wind speed. Any release of pollutants from the containment enclosure(s), in excess of applicable

state or federal limits, to the surrounding environment due to containment failure will result in the immediate suspension of work. Prior to resuming work, the Contractor shall take appropriate actions to abate the discharge and obtain the Department's concurrence on a plan of action to prevent reoccurrence. The time and costs associated with any delays and clean-up, modifications, and rebuilding of the containment enclosure(s) resulting from wind damage or associated with any actions required to prevent any reoccurrence of release of pollutants caused by wind forces shall be borne by the Contractor. Any delays due to the suspension of work or due to containment failure, as the result of wind forces, shall be considered Inexcusable Delays. The Contractor shall monitor and document actual wind speeds on the existing structure(s), as appropriate, to ensure the safety of the existing structure(s); the cost of all wind monitoring shall be incidental to related Contract Pay Items.

- D. A plan for staging, installing, moving, and removing the containment and the methods of attachment that will be used. Attachment points to main framing members only (main girders, floorbeams, truss members may be allowed with prior approval from the Resident) will be allowed. The plan shall include the methods of access that will be provided to work areas inside containment, locations of safety lines, locations of containment entryways, etc. The containment system must comply with U.S. Coast Guard requirements, as applicable.
- E. Detailed plans for lighting the inside of the containment for surface preparation, painting, and inspection. Lighting shall conform to the requirements of SSPC Guide 12, Guide for Illumination of Industrial Painting Projects, Table 1.
- F. Detailed plans for maintaining the environmental conditions required during coating application and curing, including monitoring, measuring and documenting environmental conditions.
- G. Detailed plans for the collection and removal of accidental spills or discharges.
- H. Technical data sheets, specification sheets and any other information needed to thoroughly describe the containment plan, materials, and containment and ventilation equipment proposed for use.

506.036 Environmental Protection Plan Thirty days prior to the initiation of on site work, the Contractor shall submit to the Department for review and comment an Environmental Protection Plan which establishes programs for the monitoring activities that will be undertaken on the Project. This plan shall include written programs to address the following:

- A. Regulated Area Monitoring and Maintenance. For establishing and maintaining regulated areas around activities which could generate airborne emissions of lead or other toxic metals.

- B. High Volume Ambient Air Monitoring. The Contractor shall contract with an independent environmental monitoring firm to conduct high volume ambient air monitoring to assure compliance with this item, National Ambient Air Quality Standards (NAAQS), and any applicable state and local regulations. The plan shall include the steps to ensure that: The monitoring equipment is properly calibrated, sited and operated; filters are properly handled and transported; the laboratory analyses are performed correctly. The Contractor shall begin the monitoring at least 24 hours prior to any abrasive blasting, for a baseline. Prior to any sampling, the Contractor shall clearly identify proposed monitor locations, including what corrective action(s) will be taken, in the event of unacceptable results. All monitoring, calculations, documentation, and forms will be provided directly to the Department by the monitoring firm.
- C. Ground (Soil) Evaluations. For inspection of the ground and soil prior to commencement, and upon completion, of the Work, to assure that the ground has not been negatively impacted by Project activities. This shall include the bridge site and the area(s) used to store equipment and waste. The Contractor shall contract with an independent environmental monitoring firm, staffed with a Maine Certified Geologist, to conduct sampling and analysis of the soil to determine whether it has been impacted by Project activities. The plan shall clearly identify proposed sampling locations and define the corrective action(s) that will be taken in the event of unacceptable results. All monitoring, calculations, documentation, and forms will be provided directly to the Resident by the monitoring firm.
- D. Water/Sediment Evaluations. For visual inspection of the water and sediment along the shores of any water bodies prior to commencement, and upon completion, of the Work to assure that the water and sediment along the shores are not negatively impacted by Project activities.
- E. Remediation of Ground (Soil), Water, and Sediment. In the event that post-Project inspection, sampling or analysis show unacceptable results, outline what steps will be taken to accomplish the necessary clean-up or remediation of the ground (soil), water, and sediment along the shores of any water bodies, as appropriate, to satisfy all applicable regulatory agencies. No additional time or compensation will be provided to the Contractor by the Department, in the event that any clean-up measures must be taken.
- F. Final Cleaning/Clearance Evaluations. Procedures and methods that will be used to conduct and document final Project clean-up, and final visual cleanliness inspections and evaluations. This process is to assure that the Project area and surrounding equipment, structures, soil, water, and sediment along the shores of any water bodies have not been negatively impacted by Project activities.

- G. Worker Protection Compliance Program. A Project-specific compliance program, prepared under the direction of, and signed and sealed by, a Certified Industrial Hygienist (CIH), for the protection of workers from lead, in accordance with 29 CFR 1926.62, and other toxic metals in the paint. Include the name, experience, and qualifications of the competent person who will be making routine inspections of Project activities to ensure compliance with the program. If Subcontractors are operating under a separate program, include the program with the submittals.
- H. Laboratory Qualifications. Provide the name of the laboratory and/or firm that will be used for regulated area exposure monitoring, worker protection, high volume ambient air monitoring and soils sampling and analysis. Provide documentation that this firm is American Industrial Hygiene Association (AIHA) accredited for metals analysis, and has successfully participated (within the previous 12 months, at a minimum) in the AIHA ELPAT program.

506.037 Pre-Production Meeting The Contractor shall coordinate a pre-production meeting with the Department's Resident at least two weeks prior to the beginning of the removal of the existing coating. The Contractor shall provide two weeks notice to the Department prior to the meeting. The meeting agenda will include procedures to be used for all lead abatement, the coating application, the inspection hold points, the responsibilities and documentation methods of each party involved, all safety methods to be used, contingency plans, and all other areas relating to the adequate completion of the painting of this Contract, including coordination with the U.S. Coast Guard, as applicable. Present at this pre-production meeting shall be all parties directly involved in the lead abatement, paint application, and inspection of this Project including the Department, the Contractor and/or Subcontractors, all Quality Control personnel, coating technical representatives, U.S. Coast Guard representatives, the Department's hazardous waste representative, a representative from the Contractor's hazardous waste transporter and any additional stakeholders who may have a direct impact on the completion of this Project. The Contractor shall be responsible for ensuring that all applicable personnel working directly, or indirectly, for the Contractor be present at this meeting.

506.04 Quality Assurance The Department will perform Quality Assurance (QA). QA may be accomplished by reviewing QC reports provided by the Contractor, by performing random inspections of work previously inspected by the Contractor and/or by randomly accompanying the Contractor's inspector during QC inspections and testing.

The Contractor shall provide the Department with the opportunity to perform QA inspections of the Work at the following hold points, as a minimum:

- A. Prior to start of work.
- B. Immediately following surface preparation.
- C. Immediately prior to application of the first coat.
- D. Prior to application of additional coats.
- E. After final coat is applied and cured.

- F. Any time the relative humidity is at, or above, 85% and the steel temperature is not 5 degrees above the dew point.

QA inspections are the prerogative of the Department. As such, the Department may, or may not, choose to perform inspections at hold points. If performed, QA inspections will be unsystematic and are not intended to be all encompassing. Consequently, if any QA inspections performed at hold points result in no rework being identified or, if no QA inspections are performed at any hold points, this does not constitute Acceptance of the Work by the Department. If the Department discovers Unacceptable Work at any time prior to Final Acceptance, the Contractor shall repair, replace, or otherwise bring into conformance with the Contract, the Unacceptable Work, at no additional cost to the Department. Refer to Standard Specification Section 107.9, Project Closeout, for procedures leading up to Final Acceptance.

The Contractor shall facilitate QA as required, by providing ample notice to the Department of availability for QA (minimum of ½ hour notice), adequate time for QA and by providing access to the work, along with all necessary safety equipment needed by the Department to perform the QA.

The Contractor shall provide all of the inspection and testing equipment needed to verify the quality of the surface preparation and coating process, including mirrors, flashlights and wet film thickness gauges. This equipment shall be made available for use by the Department at all times. All equipment shall be properly maintained and kept in working order by the Contractor.

The Contractor shall provide access and railing in compliance with OSHA standards for representatives of the Department to all work locations where cleaning or coating application may be in progress, for the purpose of QA. The Contractor is also responsible for providing adequate lighting for QA purposes, at no additional cost to the Department.

If the Contractor is dissatisfied in any way with the Department's management of its QA program, the Contractor shall bring this issue immediately to the attention of the Resident or, at the latest, to the next scheduled Progress Meeting.

506.05 Protective Measures During surface preparation and field painting of the existing structural steel, the Contractor shall provide adequate safety measures for the protection of the public and surrounding area against damage due to paint drippings, paint spatter, over-spray, falling objects, etc. The Contractor is fully responsible for property damage or personal injury which may result from operations incidental to surface preparation of the structural steel and the field application of the coating system. The coating system shall be protected at all times during application and curing to prevent contamination caused by construction or traffic activities. No coating material shall be stored on the bridge structure, or under the bridge structure.

506.06 Surface Preparation Chloride and ferrous salts should be expected to be present, especially at corrosion sites. Before any existing coating can be removed, these salts must be reduced to acceptable levels. Verify that residual soluble salts across the entire bridge are at a

surface cleanliness condition of NV-2, or better, as described in SSPC-SP 12, as determined by the Bresle Test, KTA SCAT Kit, Chlor-Rid Test or approved equal.

Test for soluble salts at a minimum of five locations per area of containment enclosure used for each day's blast production area, unless a lesser number of locations is mutually agreed upon by the Contractor and the Department. If unacceptable levels of soluble salt remain, low-pressure water wash or steam clean the affected areas until acceptable results are achieved. All testing/retesting shall be incidental to the Surface Preparation and shall be at no additional cost to the Department and shall not be cause for a time extension.

Use low-pressure water washing or steam cleaning to remove pigeon droppings, grease, unacceptable levels of soluble salts or other contaminants.

The abrasive mix used for blast cleaning shall be properly sized to produce an angular anchor profile 25-75 microns (1-3 mils) in depth as measured in accordance with ASTM Standard D4417 Method C (replica tape) and ASTM Standard D4417A (angularity profile). All surfaces coated by the Contractor shall be protected from blast cleaning operations.

506.061 Pre-Production Surface Preparation Test Sections Prepare test sections prior to production surface preparation. Prepare at least one test section for each specified degree of surface preparation. Test sections should be at least 1 square meter in size and include representative surfaces such as riveted and bolted connections. Prepare the test section surface preparation using the same equipment, materials and procedures that will be used for the duration of the Project. Perform the test cleaning in locations approved by the Department.

SSPC-Vis 1 and SSPC-Vis 3 photographic standards, as applicable, will be used by the Department to determine the level of cleanliness achieved. Do not proceed with production surface preparation activities until the Department agrees that the test section conforms to the applicable cleanliness requirements. The agreed upon test areas shall be masked off and left unpainted until the completion of the Project and will be used for calibration of gauges by both Department and Contractors personnel. A desiccant filled masking paper shall be used, all at no additional cost to the Department.

506.062 Removal of Existing Debris Remove and properly dispose of accumulated winter sand/salt, bird droppings, dirt, grease, and debris from all areas to be prepared and painted prior to undertaking any paint removal or surface preparation operations.

506.063 Sharp Edges and Steel Defects Remove by grinding all fins, tears, slivers, scabs, laminations, etc., that are present on any steel member, or that become apparent during the blasting operation. Re-blast areas that have been ground to achieve the specified profile. Immediately report to the Department any cracks or significant metal loss found in the structural steel.

506.064 Removal of Pack Rust Remove all rust scale on any surface and loose pack rust that has formed between structural members. Remove tight pack rust until the highest point is a minimum of 3 mm (1/8 inch) below the surface of the surrounding steel.

Exercise care to avoid any nicking or gouging of the steel during rust removal. Nicks and gouges are cause for a suspension of activities until appropriate adjustments are made to prevent a reoccurrence. Damage to steel by the Contractor shall be repaired by the Contractor as approved by, and at no cost to, the Department and no additional time will be added.

506.065 Compressed Air Cleanliness Provide compressed air that is free from moisture and oil contamination. Conduct a white blotter test in accordance with ASTM D 4285 to verify the cleanliness of the compressed air. Conduct the test at least once per shift for each compressor system. Sufficient freedom from oil and moisture is confirmed if soiling or discoloration is not visible on the paper.

If air contamination is identified, suspend operations and make adjustments as necessary to achieve clean, dry air.

506.07 Mixing Thoroughly mix the coating according to the manufacturer's recommendations. Thinning, if necessary shall be per the manufacturer's recommendations.

506.08 Conditions for Coating Apply and cure all coatings in accordance with the manufacturer's recommendations. The Contractor shall provide digital data recorders that measure and record temperature and relative humidity during the curing period for all coatings. The Contractor shall provide a minimum of two data recorders, which shall be placed in the immediate vicinity of the curing operation, and shall also provide the Department with the software necessary to download the recorded data. The data recorders shall measure and record the temperature and relative humidity during the entire curing cycle. No subsequent coating shall be applied until the Contractor demonstrates that the curing has met the requirements of the manufacturer's product data sheets.

506.09 Paint Application Caulking is required to seal all gaps between abutting surfaces over 3 mm ( 1/8 inch) wide and areas of pack rust that cannot be removed, as directed by the Department. Apply the caulking before the finish coat is applied. Provide the name, generic type, technical data sheets, and application instructions for the material to the Department. Provide written concurrence from the coating manufacturer that the caulking is compatible for use with the coating.

After the structural steel members have been prepared to the required surface preparation standard, all edges, nuts, bolt heads, ends of bolts, rivets and corners shall be striped by brush painting with the primer coat. Spray striping will only be allowed if the Contractor provides contrasting primer colors- one for the spray striping and one for the primer coat- this will be at no additional cost to the Department. If the primer coating that the Contractor has chosen is not recommended by the coating manufacturer to be used in brush or spray striping, then the

Contractor shall provide a stripe coating recommended by the coating manufacturer that is compatible with the primer coat, at no additional cost to the Department. Areas that are not accessible to spray coating will need to be striped by brushing. Coating material used for striping shall not be thinned in excess of the coating manufacturer's recommendations. After this stripe coat has been applied, the Contractor shall apply the full primer coat to all areas of the existing steel that had been prepared and cleaned. The primer coat, stripe coat and intermediate coat shall be contrasting colors, at no additional cost to the Department. The application of the intermediate and topcoat shall not commence until the preceding coats are thoroughly dry, or per the manufacturer's recommendations. Dry film thickness (DFT) measurements shall be taken between each coat and after the final coat and the DFT's of each coat recorded, in accordance with SSPC-PA 2. The dry film thickness of each coat, primer to topcoat, shall be between the minimum and maximum DFT recommended by the manufacturer. Any coat in excess of the maximum value recommended by the manufacturer shall be remedied to an acceptable condition at no additional cost to the Department, by methods acceptable to the coating manufacturer and the Department.

Each coat of paint shall be applied in a neat and workmanlike manner. All coating shall take place inside the approved containment. The coating shall be applied smoothly and uniformly without film defects, in conformance with these specifications and applicable provisions of SSPC-PA 1 and SSPC-PA 2.

Skips, thin areas or other deficiencies shall be corrected before each succeeding coat is applied. The surface of the paint receiving additional coating shall be free from dust, grease, oil or any other contaminant which would prevent bonding.

Brushes, when used shall be of good quality so as not to leave bristles in the coating and have sufficient body and length of bristle to spread the coating in a uniform flow.

Rollers, when used, shall be of a type which will not leave a stippled texture or roller particles on the coated surface.

Coating, when applied with spray equipment shall be immediately followed by brushing when necessary, to eliminate runs, sags and other film defects.

Repair damaged coating or defectively applied coating (runs, sags, skips, misses, etc.). Remove the affected coating layers and reapply. If all coating layers are damaged or defective, remove all coating layers to the specified degree of cleanliness. Feather the edges of the remaining coating to create a smooth transition from the repaired area to the remaining coating. Reapply all affected coating layers. Costs for all repairs shall be incidental to the Work.

506.10 Samples for Testing The Department may require random coating material samples from the Contractor. If necessary, the samples will be sent to an independent certified laboratory to obtain infrared spectra to check the formulation compared to that on the approved coatings list. Sampling and testing shall be at no additional cost to the Department. If the material fails

the independent lab analysis, the Contractor shall remove and replace the coating to the Contract specified conditions, at no additional cost to the Department.

506.11 Waste Management The Contractor shall collect, store and dispose of all hazardous, special and solid waste in compliance with relevant federal, state and local laws and requirements. The procedures used for management and disposal of lead paint and related waste shall conform to the latest requirements of SSPC Guide 7, *Guide for the Disposal of Lead-Contaminated Surface Preparation Debris*. The Contractor shall have a copy of this guide available on site at all times. The Contractor shall also have a copy of the Maine Department of Environmental Protection's (DEP's) *Handbook for Hazardous Waste Generators* and a copy of the *State of Maine Hazardous Waste Management Rules*, 06-096 CMR Chapters 850-857, on site at all times. Thirty days prior to generating any waste, the Contractor shall submit their Waste Management Plan which shall include the Spill Prevention Control and Countermeasure Plan (SPCCP), to the Department for review and comment. Work shall not proceed until the Department has reviewed and commented on this plan.

The Department has "Small Quantity Generator-Plus (SQG-Plus)" hazardous waste status for all hazardous waste activities associated with this Contract, as defined by DEP in the *Handbook for Hazardous Waste Generators*. The Contractor shall perform all work on behalf of the Department and comply with all federal, state and local regulations. Except for an accumulation limit and site specific identification number, all requirements associated with SQG-Plus status apply. Given the temporary nature of the work, DEP has excluded the SQG-Plus accumulation rate restriction and permanent identification number for these bridge maintenance efforts as long as all other SQG-Plus requirements are fully complied with.

The Contractor shall place impervious tarps under all equipment, storage areas and structures used for storage that are associated with hazardous/special waste.

All hazardous waste shall be managed in US DOT approved containers and stored in an approved locking security structure (e.g., lockable container box) which has a firm, impervious, floor surface and secondary containment that is either 110% of the size of the largest container or 20% of the size of all containers, whichever is larger. All waste containers must be labeled with the words "Hazardous Waste", the hazard (e.g., Toxic, flammable, etc.), the start date, full date, site location and generator information. The lockable security structure must be labeled "Danger-Unauthorized Personnel Keep Out" and shall be locked at all times when not being accessed. No more than three 55-gallon containers of hazardous waste, not to exceed a maximum total weight of 1,320 pounds, may be stored at the site at any time. Waste containers in the waste storage security structure must be inspected each operating day and a log must be maintained by the Contractor, and provided to the Department at the end of the Project. The Contractor shall store all hazardous waste, in conformance with all other DEP and Federal Rules, including Chapter 851, Section 13, Part C(7)(i) and 40 CFR 2674.14. Hazardous wastes are limited to an on-site storage time of 180 days following the filling of a container.

The Contractor shall test paint debris to determine the degree of lead and/or chromium hazard for disposal at a licensed Treatment/Storage/Disposal (TSD) Facility. A minimum of one composite sample representative of each waste type must be collected and tested for Toxicity Characteristic Leaching Procedure (TCLP) constituents, in accordance with the procedures outlined in EPA SW846 Method 1311. The Department must be notified at least one week in advance of the date of sampling activities and provided the proposed protocol for sample collection. The Department shall witness the sampling. Chain-of-custody must be adhered to for sample removal. Certified TCLP test results shall be provided to the Department upon receipt by the Contractor.

The Contractor shall inform the Department at least one week in advance of planned date(s) for removal of hazardous waste from the job site. The Department shall obtain a provisional Environmental Protection Agency Identification Number prior to shipping any hazardous waste for disposal. This provisional number must be used by the Contractor to ship hazardous waste off site. The Contractor shall secure a Department approved transporter (e.g., Enpro Environmental Services, Inc., or Environmental Projects, Inc. (EPI)) licensed by DEP for transportation of hazardous waste. Preparation of all necessary transportation forms is the responsibility of the Contractor. The Hazardous Waste Manifest must be approved and signed by the Department. A six part, pre-numbered Uniform Hazardous Waste Manifest (EPA Form 8700-22) shall be prepared when shipping hazardous waste. The appropriate original sheets of the multi-part hazardous waste manifest must be provided to the Department and must be sent to the Department's Manager of the Groundwater and Hazardous Waste Division, Environmental Office, State House Station #16, Augusta, Maine, 04333-0016.

The Contractor shall select a Department approved TSD facility (using Enpro or EPI), as soon as the waste has been tested and the results are known. The Contractor shall also obtain approval for acceptance of the waste from the selected facility prior to transport.

Hazardous/special paint debris and other waste shall not be placed or accumulated on unprotected ground or released to waters of the State of Maine. Work areas shall be adequately shielded at all times to prevent dispersion of debris by wind or rain. All of the Contractor's equipment and storage areas used for the handling and storage of hazardous waste and hazardous materials shall have impervious tarps placed under them. Any evidence of improper storage and handling shall be cause for immediate suspension of work in progress, and work will not be allowed until corrective actions are taken. Emergency procedures to be taken in the event of a release of hazardous/special waste or hazardous matter to the environment shall be part of the Contractor's Spill Prevention, Control and Countermeasures Plan that is required as part of the Contractor's Waste Management Plan and by the Department's Supplemental Specifications and Supplemental Standard Details for Construction, Section 656.3.4, f. Spill Prevention.

The Contractor shall have Aid Agreements with the local fire department, police department, hospital and hazardous waste spill responder. Copies of these agreements shall be provided to the department prior to generating any waste, in conformance with the DEP Rules, Chapter 851, Section 13, Part C (7)(c)(ii) and 40 CFR 264.37.

Failure of the Contractor to comply with this section shall result in the following:

- A. First finding of non-conformity shall be a written warning which will include a deadline for compliance.
- B. Second finding of non-conformity shall be documented in writing, and all operations by the Contractor, except those needed to restore compliance, will be immediately suspended, until full compliance has been restored.
- C. Third and subsequent findings of non-conformity will be documented in writing and all operations shall be immediately suspended, except those needed to restore compliance, until full compliance has been fully restored, and the Contractor assessed a penalty of \$10,000.00 per incident. If the Contractor fails to restore the Project into compliance, additional fines shall be assessed.

All penalties assessed shall be in addition to any fines assessed by DEP/EPA for failing to comply with the Federal, State, or local regulations. The Contractor shall not be granted additional time for suspensions of work due to noncompliance.

506.12 Method of Measurement Surface Preparation of Existing Structural Steel shall be measured for payment as one lump sum, complete and accepted.

Field Painting of Existing and New Structural Steel shall be measured for payment as one lump sum, complete and accepted.

Containment and Pollution Control Measures shall be measured for payment as one lump sum, complete and accepted.

Disposal of Special Waste or Hazardous Waste materials shall be measured for payment as one lump sum.

506.13 Basis of Payment The accepted quantity of Surface Preparation of Existing Structural Steel will be paid at the respective Contract lump sum price, which shall be full compensation for furnishing all materials, labor, tools, equipment, scaffolding, QC activities, and any other incidentals necessary for the satisfactory performance of the work.

The accepted quantity of Field Painting of Existing and New Structural Steel will be paid at the Contract lump sum price, which shall be full compensation for furnishing all material, labor, equipment, scaffolding, QC activities, and incidentals necessary for the satisfactory performance of the work.

Brunswick-Durham Road PIN 12644.00  
Brunswick-River Road PIN 15602.00  
Yarmouth –Bayview Street PIN 15612.00  
January 15, 2009

Containment and pollution control will be paid for at the Contract lump sum price, which price shall be compensation for furnishing all materials, labor, equipment, and incidentals necessary for the satisfactory performance of the work.

Disposal of Special Waste or Hazardous Waste materials will be paid at the Contract lump sum price, which price shall be full compensation for all permits, tests, transportation, tipping fees and incidentals necessary for the satisfactory performance of the work.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
506.144 Field Painting of Existing and New Structural Steel	Lump Sum
506.17 Surface Preparation of Existing Structural Steel	Lump Sum
506.18 Containment and Pollution Control Measures	Lump Sum
506.191 Disposal of Special Waste or Hazardous Waste	Lump Sum

**SPECIAL PROVISION  
SECTION 652  
MAINTENANCE OF TRAFFIC  
(Traffic Control)**

652.01 Description: The following paragraph is added:

The Contractor will be required to provide a Traffic Control Plan (TCP) to the Department within 15 days after the award, but no less than 10 working days before the Pre construction Meeting. The Department shall have 15 working days to review and approve the Traffic Control Plan. If not approved, any resubmission of the TCP shall be governed by the review times in Section 105 of the Standard Specifications. This TCP shall include a description of how the Contractor will maintain traffic throughout the duration of the project, as well as what traffic control devices will be used to maintain traffic, and the placement of these traffic control devices. The Contractor shall provide a Traffic Control Supervisor who will be responsible for providing traffic control management in compliance with the contract and the Manual of Uniform Traffic Control Devices (MUTCD), including supervision of personnel for the installation, inspection, maintenance and removal of all traffic control devices on the project. Work Zone Crash Cushions shall meet NCHRP 350 test criteria. Drums and cones shall meet NCHRP test criteria. A Truck Mounted Attenuator shall be used as part of the traffic control plan for these projects. It shall comply with Special Provision 527.

For all sites a minimum of one 12 foot lane width shall be maintained at all times in each direction. Work shall only be allowed Monday through Friday. No lane closures shall be allowed during the Monday and Friday prior to and after the following holidays without permission from the Department.(Memorial Day, July 4<sup>th</sup>, Labor Day).

For Brunswick River Road (PIN 15602.00):

Northbound and South Bound:

No work shall be performed prior to July 15<sup>th</sup>. July 15 through September 1<sup>st</sup> work can only be performed between the hours of 8 PM and 6 AM. After September 1 until November 15<sup>th</sup> work can be performed during typical workday hours (6 am -8 pm)

For Brunswick Durham Road (PIN 12644.00):

Southbound: July 1<sup>st</sup> through September 1<sup>st</sup> work can only be performed between the hours of 8 PM and 6 AM. All other times of the year work can be performed during typical workday hours (6 am -8 pm).

Northbound: Work shall only be performed between the hours of 8PM and 6 AM.

For Yarmouth-Bayview Street (PIN15612.00):

Southbound and Northbound: Work shall only be performed between the hours of 8PM and 6 AM. Work shall not begin until after August 1<sup>st</sup>

No disruption to traffic will be allowed before the TCP is reviewed and approved by the Department. Any time traffic is disrupted when setting up or removing traffic control devices a uniformed traffic control officer (Maine State Police/Sheriff/Local Police) shall be present. The contractor shall be responsible for contacting and scheduling when the uniformed traffic control officers are to be present. The Uniformed Traffic Control Officer does not need to be present once the maintenance of traffic devices are in place and the traffic lane(s) are operational. Uniformed traffic control officers will be paid for by the Department directly and shall not be included in the Contractor's contract price for Work Zone Traffic Control.

Removal and replacement of signs and sign supports currently attached to the bridges shall be removed, replaced, or disposed of as follows:

#### Yarmouth – Bayview Street

The sign on the structure is labeled as “Bayview Street” sign (both Northbound and Southbound). The Contractor can remove the sign to perform their work and reinstall it to its existing locations when the work is completed.

#### Brunswick – Durham Road

The contractor shall coordinate the removal of this sign Northbound “295 North Topsham Augusta” by calling Gary Waddell (MDOT Interstate Sign Crew Supervisor) at 557-0335 one week before removal. The Contractor shall replace the sign as soon as the painting of this section is complete.

The Southbound and Northbound, small “Durham Road” signs can be removed by the Contractor when necessary and be put back in there original locations when the painting is complete.

#### Brunswick – River Road

The existing Northbound sign is to be removed and relocated by MDOT. The Contractor shall remove and dispose of old framework that is attached to bridge.

The Southbound and Northbound, small “River Road” signs can be removed by the Contractor when necessary and be put back in there original locations when the painting is complete.

#### 652.15 Method of Measurement:

This entire Subsection is revised to read:

Traffic Control Supervisor, installation and maintenance of traffic control devices, and the placement, removal and resetting of cones, drums, barricades (Type I and III), work zone crash cushions, signs, temporary traffic signals, and any other traffic control devices

included in the TCP will be measured as one lump sum for all work authorized and performed.

652.16 Basis of Payment:

This entire Subsection is revised to read:

Traffic Control will be paid for at the contract lump sum price. Payment will be full compensation for the Traffic Control Supervisor, and the placement, removal and resetting of cones, drums, barricades (Type I and III), work zone crash cushions, signs, temporary traffic signals, and any other traffic control devices included in the TCP as necessary, and maintenance thereof. Removal and/or replacement and/or disposal of currently attached signs and or supports shall be included under this section. Maintenance of signs includes: replacing devices damaged, lost, or stolen, and cleaning and moving as many times as necessary throughout the life of the contract, regardless whether the work areas or projects are geographically separated or not separated. There will be no payment for work done under this item after the expiration of contract time.

Payment will be made under:

Pay Item Pay Unit

652.39 Work Zone Traffic Control Lump Sum