



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

January 11, 2005

SUBJECT: FAS 186 (Rock Island Road)
Project BRS-186(105)
Section 01-00278-00-BR
Lee County
Contract No. 85336
Item 58
January 21, 2005 Letting
Addendum (A)

TO PROSPECTIVE BIDDERS:

Due to clarify information necessary to revise the following:

**Proposal – Removed GBSP 22 “Cleaning and Painting New Metal Structures”.
Added Special Provision “Cleaning and Painting New Metal Structures”.**

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal. Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Since the proposal sheets are displayed back to back, bidders are cautioned to exercise care when inserting revised and/or added special provisions into their proposals.

Please call 217-782-7806 if any of the above-described material is not included in this transmittal.

Very truly yours,

Michael L. Hine
Engineer of Design and Environment

A handwritten signature in black ink, appearing to read 'Ted B. Walschleger' followed by 'P.E.'.

By: Ted B. Walschleger
Engineer of Project Development
and Implementation

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Added 1-11-05

GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective: January 1, 2004

File Name	X	Title	Effective	Revised	Page No.
GBSP1		Formed Concrete Repair	Oct 10, 1995	Aug 21, 2002	
GBSP2		Drilled Shafts	May 1, 2001	Jan 1, 2002	
GBSP3		High Performance Shotcrete	June 7, 1994	Jan 1, 2002	
GBSP4		Polymer Modified Portland Cement Mortar	June 7, 1994	Jan 1, 2002	
GBSP11	X	Permanent Steel Sheet Piling	Dec 15, 1993	Oct 1, 2002	81
GBSP12		Drainage System	June 10, 1994	Jan 1, 2002	
GBSP13		Floating Bearing	Oct 13, 1988	June 23, 2003	
GBSP14		Jack and Remove Existing Bearings	April 20, 1994	June 24, 2003	
GBSP15		Three Sided Precast Concrete Structure	July 12, 1994	Mar 31, 2003	
GBSP16		Jacking Existing Superstructure	Jan 11, 1993	Jan 3, 2002	
GBSP17		Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2002	
GBSP18		Modular Expansion Joint	May 19, 1994	June 23, 2003	
GBSP19		Fabric Reinforced Elastomeric Trough	June 6, 1994	Sept 12, 2003	
GBSP21		Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003		
GBSP22	X	Cleaning and Painting New Steel Structures	Sept 13, 1994	April 2, 2003	82-88
GBSP25		Cleaning and Painting Existing Metal Structures	Oct 2, 2001	April 7, 2003	
GBSP26		Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	Mar 12, 2003	
GBSP28		Deck Slab Repair	May 15, 1995	June 23, 2003	
GBSP29		Bridge Deck Microsilica Concrete Overlay	May 15, 1995	June 23, 2003	
GBSP30		Bridge Deck Latex Concrete Overlay	May 15, 1995	June 23, 2003	
GBSP31		Bridge Deck High-Reactivity Metakaolin (HRM) Concrete Overlay	Jan 21, 2000	June 23, 2003	
GBSP32		Temporary Sheet Piling	Sept 2, 1994	Dec 13, 2002	
GBSP33		Pedestrian Truss Superstructure	Jan 13, 1998	Sept 15, 2003	
GBSP34		Concrete Wearing Surface	June 23, 1994	Jan 1, 2002	
GBSP35		Silicone Bridge Joint Sealer	Aug 1, 1995	Dec 16, 2002	
GBSP36		Surface Preparation and Painting Req. for Weathering Steel	Nov 21, 1997	Jan 9, 2002	
GBSP37		Underwater Structure Excavation Protection.	April 1, 1995	Aug 21, 2002	
GBSP38		Mechanically Stabilized Earth Retaining Walls.	Feb 3, 1999	Oct 6, 2003	
GBSP39		Precast, Prestressed Concrete Deck Beams Stage Constr.	Sept 1, 1994	Jan 1, 2002	
GBSP40		Fabric Reinforced Elastomeric Mat	July 14, 2000	Sept 12, 2003	
GBSP41		Bridge Joint Sealing System	May 1, 2001	Jan 1, 2002	
GBSP42		Drilled Soldier Pile Retaining Wall	Sept 20, 2001	April 25, 2003	
GBSP43		Driven Soldier Pile Retaining Wall	Nov 13, 2003	April 25, 2003	
GBSP44		Temporary Soil Retention System	Dec 30, 2002		
GBSP45		Bridge Deck Thin Polymer Overlay	May 7, 1997	March 5, 2003	
GBSP46		Geotextile Retaining Walls	Sept 19, 2003		
GBSP47		High Performance Concrete Structures	Aug 5, 2002	Sept 10, 2003	
GBSP48		Precast Concrete Structures	Sept 12, 2003		

Removed *

Added 1-11-05

CLEANING AND PAINTING NEW METAL STRUCTURES

Description. The material and construction requirements that apply to cleaning and painting new structural steel shall be according to the applicable portion of Sections 506 of the Standard Specifications except as modified herein. The three coat paint system shall be the system as specified on the plans and as defined herein.

Materials. All materials to be used on an individual structure shall be produced by the same manufacturer. The Bureau of Materials and Physical Research has established a list of all products that have met preliminary requirements. Each batch of material must be tested and approved by that bureau before use.

The paint materials shall meet the requirements of the following articles of the Standard Specification:

<u>Item</u>	<u>Article</u>
(a) Inorganic Zinc-Rich Primer	1008.22
(b) Waterborne Acrylic	1008.24
(c) Aluminum Epoxy Mastic	1008.25
(d) Organic Zinc-Rich Primer (Note 1)	
(e) Epoxy Intermediate (Note 1)	
(f) Aliphatic Urethane (Note 1)	

Note 1: These material requirements shall be according to the Special Provision for the Organic Zinc-Rich Paint System.

Submittals. At least 30 days prior to beginning field painting, the Contractor shall submit for the Engineer's review and acceptance, the following applicable plans, certifications and information for completing the field work. Field painting can not proceed until the submittals are accepted by the Engineer. Qualifications, certifications and QC plans for shop cleaning shall be available for review by the QA Inspector.

* a) Contractor/Personnel Qualifications. Required painting of the steel sheet piling, wingwalls, and piling may be performed by a contractor without SSPC-QP3 certification if the contractor provides evidence of successful acceptance of 3 projects of similar or greater complexity.

Personnel managing the field Quality Control program(s) for this work shall possess a minimum classification as a National Association of Corrosion Engineers (NACE) Coating Inspector Technician, or shall provide evidence of successful inspection of 3 projects of similar or greater complexity and scope that have been completed in the last 2 years. Copies of the certification and/or experience shall be provided.

The personnel performing the QC tests for this work shall be trained in coatings inspection and the use of the testing instruments. Documentation of training shall be provided.

- b) Quality Control (QC) Program. The field QC Programs shall identify the following; the instrumentation that will be used, a schedule of required measurements and observations, procedures for correcting unacceptable work, and procedures for improving surface preparation and painting quality as a result of quality control findings. The field program shall incorporate the IDOT Quality Control Daily Report form, as supplied by the Engineer.
- c) Field Cleaning and Painting Inspection Access Plan. The inspection access plan for use by Contractor QC personnel for ongoing inspections and by the Engineer during Quality Assurance (QA) observations.
- d) Surface Preparation/Painting Plan. The surface preparation/painting plan shall include the methods of surface preparation and type of equipment to be utilized for solvent cleaning, abrasive blast cleaning, washing, and power tool cleaning. The plan shall include the manufacturer's names of the materials that will be used, including Product Data Sheets and Material Safety Data Sheets (MSDS).

A letter or written instructions from the coating manufacturer shall be included, indicating the required drying time for each coat at the minimum, normal, and maximum application temperatures before the coating can be exposed to temperatures or moisture conditions that are outside of the published application parameters.

Field Quality Control (QC) Inspections. The Contractor shall perform first line, in process QC inspections of each phase of the work. The Contractor shall implement the submitted and accepted QC Program to insure that the work accomplished complies with these specifications. The Contractor shall use the IDOT Quality Control Daily Report form supplied by the Engineer to record the results of quality control tests. The completed reports shall be turned into the Engineer before work resumes the following day.

The Contractor shall have available at the field site, all of the necessary inspection and testing equipment. The equipment shall be available for the Engineer's use when requested.

Field Quality Assurance (QA) Observations. The Engineer will conduct QA observations of any or all phases of the work. The Engineer's observations in no way relieve the Contractor of the responsibility to provide all necessary daily QC inspections of his/her own and to comply with all requirements of this Specification.

The Engineer has the right to reject any work that was performed without adequate provision for QA observations.

The Engineer will issue a Non-Conformance Report when cleaning and painting work is found to be in violation of the specification requirements, and is not corrected to bring it into compliance before proceeding with the next phase of work.

Inspection Access and Lighting. The Contractor shall facilitate the Engineer's observations as required, including allowing ample time to view the work. The Contractor shall furnish, erect and

move scaffolding or other mechanical equipment to permit close observation of all surfaces to be cleaned and painted. This equipment shall be provided during all phases of the work. Examples of acceptable access structures include:

- Mechanical lifting equipment, such as, scissor trucks, hydraulic booms, etc.
- Platforms suspended from the structure comprised of trusses or other stiff supporting members and including rails and kick boards.
- Simple catenary supports are permitted only if independent life lines for attaching a fall arrest system according to Occupational Safety and Health Administration (OSHA) regulations are provided.

When the surface to be inspected is more than 1.8 m (6 ft) above the ground or water surface, the Contractor shall provide the Engineer with a safety harness and a lifeline according to OSHA regulations. The lifeline and attachment shall not direct the fall into oncoming traffic. The Contractor shall provide a method of attaching the lifeline to the structure independent of the inspection facility or any support of the platform. When the inspection facility is more than 800 mm (2 1/2 ft) above the ground, the Contractor shall provide an approved means of access onto the platform.

The Contractor shall provide artificial lighting in areas where natural light is inadequate, as determined by the Engineer, to allow proper cleaning, inspection, and painting. Illumination for inspection shall be at least 325 LUX (30 foot candles). Illumination for cleaning and painting, including the working platforms, access, and entryways shall be at least 215 LUX (20 foot candles).

Construction Requirements. The Contractor shall be responsible for any damage caused to persons, vehicles, or property, except as indemnified by the Response Action Contractor Indemnification Act. Whenever the intended purposes of the protective devices are not being accomplished, as determined by the Engineer, work shall be immediately suspended until corrections are made. Painted surfaces damaged by any Contractor's operation shall be removed and repainted, as directed by the Engineer, at the Contractor's expense.

The Contractor shall comply with the provisions of the Illinois Environmental Protection Act. Paint drips, spills, and overspray are not permitted to escape into the air or onto any other surfaces or surrounding property not intended to be painted. Containment shall be used to control paint drips, spills, and overspray, and shall be dropped and all equipment secured when sustained wind speeds of 64 kph (40 mph) or greater occur, unless the containment design necessitates action at lower wind speeds. The contractor shall evaluate project-specific conditions to determine the specific type and extent of containment needed to control the paint emissions and shall submit a plan for containing or controlling paint debris (droplets, spills, overspray, etc.) to the Engineer for approval prior to starting the work. Approval shall not relieve the Contractor of their ultimate responsibility for controlling paint debris from escaping the work zone.

Surface and Weather Conditions. Surfaces to be painted after cleaning shall remain free of moisture and other contaminants. The Contractor shall control his/her operations to insure that dust, dirt, or moisture does not come in contact with surfaces cleaned or painted that day.

The surface temperature shall be at least 3°C (5°F) above the dew point during final surface preparation operations. The paint manufacturers' published literature shall be followed for specific temperature, dew point, and humidity restrictions during the application of each coat.

The Contractor shall monitor temperature, dew point, and humidity every 4 hours during surface preparation and coating application in the specific areas where the work is being performed. The frequency of monitoring shall increase if weather conditions are changing. The Engineer has the right to reject any work that was performed under unfavorable weather conditions. Rejected work shall be removed, recleaned, and repainted at the Contractor's expense.

Seasonal Restrictions on Field Cleaning and Painting. Field cleaning and painting work shall be accomplished between April 15 and October 31 unless authorized otherwise by the Engineer in writing.

Inorganic Zinc-rich/ Waterborne Acrylic Paint system. This system shall be for field application of the coating system, shop application of the intermediate and top coats will not be allowed.

All structural steel designated to be painted shall be given one coat of inorganic zinc rich primer on exposed surfaces. In the field, before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed to remove dirt, oil, lubricants, oxidation products, and foreign substances. Washing shall involve the use of potable water at a pressure between 7 MPa (1000 psi) and 34 MPa (5000 psi) and according to "Low Pressure Water Cleaning" of SSPC-SP12. Paint spray equipment shall not be used to perform the water cleaning. All damaged primed areas shall then be spot cleaned per SSPC-SP3 and spot primed with aluminum epoxy mastic. The structural steel shall then receive one full intermediate coat and one full topcoat of waterborne acrylic paint.

- a) Paint drips, spills, and overspray must be controlled. If containment is used to control paint drips, spills, and overspray, the containment shall be dropped and all equipment secured when sustained wind speeds of 64 kph (40 mph) or greater occur. When the protective coverings need to be attached to the structure, they shall be attached by bolting, clamping, or similar means. Welding or drilling into the structure is prohibited unless approved by the Engineer in writing.
- b) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
 - Zinc Primer: 75 microns (3 mils) min., 150 microns (6 mils) max.
 - Epoxy Mastic: 125 microns (5 mils) min., 180 microns (7 mils) max.
 - Intermediate Coat: 50 microns (2 mils) min., 100 microns (4 mils) max.
 - Topcoat: 50 microns (2 mils) min., 100 microns (4 mils) max.

The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 180 and 355 microns (7 and 14 mils).

- c) The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
- d) Damage to the paint system shall be spot cleaned using SSPC-SP3. The cleaned areas shall be spot painted with a penetrating sealer as recommended by the manufacturer, which shall overlap onto the existing topcoat. Then the aluminum epoxy mastic shall be spot applied not to go beyond the area painted with the sealer. The acrylic intermediate and topcoat shall be spot applied to the mastic with at least a 150 mm (6 inch) overlap onto the existing topcoat.

Special Instructions.

Painting Date/System Code. At the completion of the work, the Contractor shall stencil in contrasting color paint the date of painting the bridge, the painting Contractors name, and the paint type code from the Structure Information and Procedure Manual for the system used. The letters shall be capitals, not less than 50 mm (2 in.) and not more than 75 mm (3 in.) in height.

The stencil shall contain the following wording "PAINTED BY (insert the name of the painting Contractor)" and shall show the month and year in which the painting was completed, followed by "CODE S" for the Inorganic Zinc/ Acrylic System. This information shall be stenciled on a visible surface designated by the Engineer.

Method of Measurement. Shop cleaning and painting new structures will not be measured for payment. Field cleaning and painting will not be measured for payment except when performed under a contract that contains a separate pay item for this work.

Basis of Payment. This work will be paid for according to Article 506.07.