Item 6
Control of Materials

1. **SOURCE CONTROL**

Use only materials that meet Contract requirements. Unless otherwise specified or approved, use new materials for the work. Secure the Engineer’s approval of the proposed source of materials to be used before their delivery. Materials can be approved at a supply source or staging area but may be inspected in accordance with Article 6.4., “Sampling, Testing, and Inspection.”

1.1. **Buy America.** Comply with the latest provisions of Buy America as listed at 23 CFR 635.410. Use steel or iron materials manufactured in the United States except when:
- the cost of materials, including delivery, does not exceed 0.1% of the total Contract cost or $2,500, whichever is greater,
- the Contract contains an alternate item for a foreign source steel or iron product and the Contract is awarded based on the alternate item, or
- the materials are temporarily installed.

Submit a notarized original of the FORM D-9-USA-1 (Department Form 1818) with the proper attachments for verification of compliance.

Manufacturing is any process that modifies the chemical content, physical shape or size, or final finish of a product. Manufacturing begins with initial melting and mixing and continues through fabrication (cutting, drilling, welding, bending, etc.) and coating (paint, galvanizing, epoxy, etc.).

1.2. **Buy Texas.** For construction or maintenance Contracts without federal funds, buy materials produced in Texas when the materials are available at a comparable price and in a comparable period of time. Provide documentation of purchases or a description of good-faith efforts on request.

2. **MATERIAL QUALITY**

Correct or remove materials that fail to meet Contract requirements or that do not produce satisfactory results. Reimburse the Department for cost incurred if additional sampling and testing is required by a change of source.

Materials not meeting Contract requirements will be rejected, unless the Engineer approves corrective actions. Upon rejection, immediately remove and replace rejected materials.

If the Contractor does not comply with this Article, the Department may remove and replace defective material. The cost of testing, removal, and replacement will be deducted from the payments due to the Contractor.

3. **MANUFACTURER WARRANTIES**

Transfer to the Department warranties and guarantees required by the Contract or received as part of normal trade practice.
4. **SAMPLING, TESTING, AND INSPECTION**

Incorporate into the work only material that has been inspected, tested, and accepted by the Department. Remove, at the Contractor's expense, materials from the work locations that are used without prior testing and approval or written permission of the Engineer.

The material requirements and standard test methods in effect at the time the proposed Contract is advertised govern. Unless otherwise noted, the Department will perform testing at its expense. In addition to facilities and equipment required by the Contract, furnish facilities and calibrated equipment required for tests to control the manufacture of construction items. If requested, provide a complete written statement of the origin, composition, and manufacture of materials.

All materials used are subject to inspection or testing at any time during preparation or use. Material which has been tested and approved at a supply source or staging area may be inspected or tested before or during incorporation into the work, and rejected if it does not meet Contract requirements. Copies of test results are available upon request. Do not use material that, after approval, becomes unfit for use.

Unless otherwise noted in the Contract, all testing must be performed within the United States and witnessed by the Engineer. If materials or processes require testing outside the contiguous 48 United States, reimburse the Department for inspection expenses.

5. **PLANT INSPECTION AND TESTING**

The Engineer may but is not obligated to inspect materials at the acquisition or manufacturing source. Material samples will be obtained and tested for compliance with quality requirements. Materials produced under Department inspection are for Department use only unless released in writing by the Engineer.

If inspection is at the plant, meet the following conditions unless otherwise specified:

- cooperate fully and assist the Engineer during the inspection,
- ensure the Engineer has full access to all parts of the plant used to manufacture or produce materials,
- provide a facility at the plant for use by the Engineer as an office or laboratory,
- provide and maintain adequate safety measures and restroom facilities, and
- furnish and calibrate scales, measuring devices, and other necessary equipment.

The Engineer may provide inspection for periods other than daylight hours if:

- continuous production of materials for Department use is necessary due to the production volume being handled at the plant, and
- the lighting is adequate to allow satisfactory inspection.

6. **STORAGE OF MATERIALS**

Store and handle materials to preserve their quality and fitness for the work. Store materials so that they can be easily inspected and retested. Place materials under cover, on wooden platforms, or on other hard, clean surfaces as necessary or when directed.

Obtain approval to store materials on the right of way. Storage space off the right of way is at the Contractor's expense.

7. **DEPARTMENT-FURNISHED MATERIAL**

The Department will supply materials as shown on the plans. The cost of handling and placing materials supplied by the Department will not be paid for directly but will be subsidiary to the Item in which they are used. Assume responsibility for materials upon receipt.
8. USE OF MATERIALS FOUND ON THE RIGHT OF WAY

Material found in the excavation areas and meeting the Department’s specifications may be used in the work. This material will be paid for at the Contract bid price for excavation and under the Item for which the material is used.

Do not excavate or remove any material from within the right of way that is not within the limits of the excavation without written permission. If excavation is allowed within a right of way project-specific location, replace the removed material with suitable material at no cost to the Department as directed.

9. RECYCLED MATERIALS

The Department will not allow hazardous wastes, as defined in 30 TAC 335, proposed for recycling. Use nonhazardous recyclable materials (NRM) only if the specification for the Item does not disallow or restrict use. Determine if NRM are regulated under 30 TAC 312, 330, 332, 334, or 335, and comply with all general prohibitions and requirements. Use NRM in accordance with DMS-11000, “Evaluating and Using Nonhazardous Recyclable Materials Guidelines,” and furnish all documentation in the manner prescribed by the Department.

10. HAZARDOUS MATERIALS

Comply with the requirements of Article 7.12., “Responsibility for Hazardous Materials.”

The Department is responsible for testing, removing, and disposing of hazardous materials not introduced by the Contractor, except for paint removal associated with Item 446, “Field Cleaning and Painting Steel,” Item 776, “Metal Rail Repair,” and Item 784, “Steel Member Repair.” The plans will indicate locations where paint on steel is suspected to contain hazardous materials. The Engineer may suspend work wholly or in part during the testing, removing, or disposing of hazardous materials, except in the case where hazardous materials are introduced by the Contractor.

Use materials that are free of hazardous materials. Notify the Engineer immediately if materials are suspected to contain hazardous materials. If materials delivered to the project by the Contractor are suspected to contain hazardous materials, have an approved commercial laboratory test the materials for contamination. Remove, remediate, and dispose of any of these materials found to be contaminated. The work required to comply with this section will be at the Contractor’s expense. Working day charges will not be suspended and extensions of working days will not be granted for activities related to handling hazardous material introduced by the Contractor.

10.1. Painted Steel Requirements. Paint containing hazardous materials will be removed as shown on the plans.

10.1.1. Paint Removed by Third Party. The Department will provide a third party to remove paint containing hazardous materials where paint must be removed to perform work when dismantling steel under Item 496, “Removing Structures.”

10.1.2. Paint Removed by the Contractor. This work may only be performed by a firm or company with one of the following certifications unless otherwise shown on the plans:

- SSPC-QP2 Category A certification for lead painting operations, or
- Certified Lead Firm by the Texas Department of State Health Services.

Maintain certifications for the duration of the Contract. Provide copies of audits and certification to the Engineer.

Comply with worker and public safety regulations including but not limited to 29 CFR Parts 1910, 1925, and 1926. Monitor permissible exposure limits in accordance with OSHA requirements.
Remove paint containing hazardous materials from designated areas shown on the plans or as directed by the Engineer. Comply with access limitations shown on the plans.

Provide power hand tools, equipped with high-efficiency particulate air filter vacuums to mechanically remove paint unless otherwise approved.

Contain, collect, store, transport, and dispose of all waste generated by cleaning operation in accordance with local, state and federal requirements including 40 CFR 302. Properly characterize and dispose of all wastes. Manage wastes in accordance with regulatory requirements and dispose in a facility authorized to accept such wastes. Provide copies of disposal manifests to the Engineer.

Refer to Item 446, “Field Cleaning and Painting Steel” for measurement and payment.

10.2. **Removal and Disposal of Painted Steel.** Painted steel will be disposed of at a steel recycling or smelting facility unless otherwise shown on the plans. If the paint contains hazardous materials, maintain and make available to the Engineer invoices and other records obtained from the facility showing the received weight of the steel and the facility name.

Refer to Item 496, “Removing Structures” and Item 497, “Sale of Salvageable Material” for measurement and payment.

10.3. **Asbestos Requirements.** The plans will indicate locations or elements where asbestos containing materials (ACM) are present. Notify the Engineer of proposed dates of demolition or removal of structural elements with ACM at least 60 days before beginning work.

The Department of State Health Services (DSHS), Asbestos Programs Branch, is responsible for administering the requirements of the National Emissions Standards for Hazardous Air Pollutants, 40 CFR Part 61, Subpart M and the Texas Asbestos Health Protection Rules (TAHPR). Based on EPA guidance and regulatory background information, bridges are considered to be a regulated “facility” under NESHAP. Therefore, federal standards for demolition and renovation apply.

The Department is required to notify the DSHS at least 10 working days (by postmarked date) before initiating demolition or renovation of each structure or load bearing member shown on the plans. If the actual demolition or renovation date is changed or delayed, notify the Engineer in writing of the revised dates in sufficient time to allow for the Department’s notification to DSHS to be postmarked at least 10 days in advance of the actual work.

Failure to provide the above information may require the temporary suspension of work under Article 8.4., “Temporary Suspension of Work or Working Day Charges,” due to reasons under the control of the Contractor. The Department retains the right to determine the actual advance notice needed for the change in date to address post office business days and staff availability.

10.3.1. **Asbestos Removed by Third Party.** At locations where unknown ACM is discovered, the Department will arrange for abatement by a third party.

10.3.2. **Asbestos Removed by the Contractor.** Maintain certification as Asbestos Abatement Contractor by the Texas Department of State Health Services for the duration of the Contract. Provide copies of audits and certification to the Engineer.

10.4. **Work Performed by a Third Party.** When the work for removal of paint or asbestos abatement is to be provided by a third party, coordinate and cooperate with the third party and the Department. Continue other work detailed in the plans not directly involved in the paint removal or asbestos abatement work. Provide notice to the Department regarding the progress of the work to allow the Department sufficient time to schedule the third party work.
11. **SURPLUS MATERIALS**

Take ownership of surplus materials unless otherwise shown on the plans or directed. Remove and dispose of materials in accordance with federal, state, and local regulations. If requested, provide an appropriate level of documentation to verify proper disposal. When materials are disposed of on private property, provide written authorization from the property owner for the use of the property for this purpose upon request.