Appendix B
Quality Control Program Checklist

Overhead Sign Structures Written Quality Control Program

The majority of contracts containing overhead sign structures include a section in the Special Provisions that is usually entitled “Sign Structures.” This section requires the Contractor to submit working drawings supplemented by a written quality control program before commencing fabrication of overhead sign structures. The submittal requirements should be discussed at the preconstruction meeting. This written quality control program is to be reviewed and approved by field personnel.

The information contained in this written quality control program shall include methods, equipment, and personnel necessary to satisfy the requirements specified in Section 56-1, “Overhead Sign Structures,” of the Standard Specifications and the special provisions. The document shall include, but not be limited to, information on the fabrication, welding, surface finishing, and installation of overhead sign structures. The following is a partial list of what should be included in this document. Parentheses following certain items indicate specific sections of the contract documents where information regarding this requirement can be obtained in the 1999 Standard Specifications. Not every item listed will be applicable to all types of overhead sign structures.
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- Specific stages in which the Engineer shall be notified for quality assurance inspection purposes. (Standard Specifications Section 56-1.03)
- Anchor bolt installation plan including the method to be used for ensuring an adequate bolt thread projection is obtained. (Standard Specifications Section 55-3.14B)
- Method of forming tubular sign structure posts to the radii shown on the plans. (Standard Specifications Section 56-1.03: bullet 4)
- Welding plan supplementing and referencing the welding quality control plan. (special provisions)
- Method and equipment to be used for drilling and finishing bolt holes to the dimensions shown on the working drawings. (Special Provisions and Standard Specifications Section 55-3.14A)
- Method, equipment, and template to be used when drilling bolt holes in removable sign panel frames. (Standard Plans Sheet RSP S8A)
- Equipment and method for hoisting and installing removable sign panel frames and sign panels. (Standard Plans Sheet RSP S8A)
- Method to be used and the equipment necessary when checking the complete sections of sign structures for straightness, alignment and dimensions. (Standard Specifications Section 56-1.03: bullet 3)
- Method and equipment necessary to achieve flatness tolerances. (special provisions)
- Method and equipment needed to prepare an assembly for the galvanization process. (Standard Specifications Section 75-1.05)
- Cleaning and painting plan for overhead sign structures. (Standard Specifications Section 59-5)
Handling plan including methods and equipment to be used for securing and lifting the structure (this should also be included in the working drawings). (Standard Specifications Section 56-1.03: bullet 5)

Repair plan for correcting any damages done to the galvanization and/or paint during the shipping and erecting process.

Traffic plan addressing the necessity of a lane closure, night work, and COZEWP when erecting the overhead sign structure.

Leveling plan including the method and equipment needed to make the bottom of the sign frame level for one-post overhead sign structures. (Standard Plans Sheet RSP S2)

Method to be used in verifying clearance and elevation requirements.

Method and equipment used for installing sign panels. (Standard Specifications Section 56-1.06)

Equipment to be used for installing and inspecting fasteners. (Standard Specifications Section 55-3.14: bullet 8)

Tensioning plan including the method and equipment to be used to verify bolt tension requirements for high strength bolted connections including a method for installing direct tension indicators and hardened washers. (Standard Plans Sections 56-1.03: bullet 7, 55-3.14B, and 55-3.14E)

Certificates and results to be furnished to the Engineer for bolt tension measuring devices and/or calibrated wrenches. (Standard Specifications Section 55-3.14: bullets 10 and 11)

Method to ensure that the complete hinge and latch assembly will hold the safety railing in a steady manner, free of wobble while in the raised position. (Standard Plans Sheet S11)

Personnel responsible for ensuring that all sign structure components are in their correct position relative to the traveled way.
The list is provided solely for the intent to serve as a guideline for reviewing the Contractor’s quality control program. The actual quality control program should satisfy the specific requirements and site conditions for each project as well as provide sufficient detail such that the Engineer is satisfied that all phases of fabrication and installation of overhead sign structures have been addressed. Where needed, Materials Engineering and Testing Services (METS) can assist in the review of this program.