



## Design Directive

**To:** Distribution

**From:** Erik Stoothoff, PE *ES*  
Chief Engineer

**Date:** August 11, 2015

**RE:** Contract Specification Development

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Specification submissions for all Design and Construction projects shall adhere to the following procedure. We are revising our terminology to remove any ambiguity for the responsibility for preparing specifications on the part of MBTA designers. The MBTA documents that were once known as the MBTA Standard Specifications will now be referred to as the MBTA Basis Specifications. These are the baseline specification sections from which each project specific contract specifications shall be developed.

1. The designer shall download each basis specification from the MBTA website, and tailor all sections to the specific needs of the project. The designer shall check the website prior to each submission to confirm that they are using the most current version of the basis specifications. Basis specifications can be accessed at:  
[www.mbta.com/business\\_center/bidding\\_solicitations/spec\\_guidelines/](http://www.mbta.com/business_center/bidding_solicitations/spec_guidelines/)

For example: Section 02300 Earthwork has 6 different backfill materials and Section 09900 Painting has 18 different paint systems. Each design project shall identify only the materials/systems/products and all salient characteristics of each required for the project.

All changes shall be tracked in each submission utilizing the 'Track Changes' tool. Subsequent submissions are only required to track new changes, and changes not yet accepted by the MBTA from previous submissions. Changes may only be accepted by the MBTA.

Specific subsections or paragraphs that require further development in coordination or input from the MBTA shall be identified with comments in the margin utilizing the 'Insert Comment' tool.

Material criteria listed in basis specifications shall be reviewed by the designer to confirm that the material criteria meet the design intent. If alternate materials are required, the specifications shall be modified to reflect those changes. Materials shall be specified based on generic type as defined by standards (AREMA, ASTM, etc).

If proprietary products are named, a minimum of three equivalent products must be included along with key physical requirements for evaluating "equal" products.

Performance/proprietary specifications shall be used sparingly, and shall be developed in accordance with the 'Competitive and Proprietary Specifications' Design Directive (forthcoming).

Each section shall include minimum QC testing and acceptance criteria.

2. A list of all specification sections shall be included in the 30% submission. The list of specifications shall include the version date of the basis specification, and "N.A." for custom sections.
3. All specification sections shall be included in the 60% submission with all changes to the Basis Specification section identified with changes tracked. Sections created specifically for the project that are not derived from the basis specifications need not have changes tracked, but shall be otherwise identified as a wholly custom specification section. Each specification section shall include in the footer two dates; 1) the revision date of the Basis Specification (N.A. shall be included for custom specifications); and 2) the date of last revision by the designer. The table of contents shall identify the version date of each basis specification parenthetically in the section name and whether it has been revised.

For example: Section 09900 Painting (2007, revised).

4. All specification sections shall be included in the 90% and 100% submissions with all changes to the sections previously submitted, and proposed modifications included in previous submissions not yet accepted by the MBTA identified with changes tracked. Each specification section shall include in the footer two dates; 1) the revision date of the Basis Specification (N.A. shall be included for custom specifications); and 2) the date of last revision by the designer. The table of contents shall identify the version date of each basis specification parenthetically in the section name and whether it has been revised.
5. A qualified independent design professional shall perform a quality control (QC) review of each specification section prior to each submission. The QC review shall include a comprehensive evaluation of the coordination of project specifications with the plans and calculations, including consistency of requirements, notes, and terminology across all documents. All QC documents must be kept on file as a project record.
6. MBTA Quality Department will audit project specification submissions. If there are sections found to have numerous errors or failure to adhere to this directive, appropriate consideration will be given to reducing/deducting design fees commensurate to the level of errors made and the designer's performance will be reflected in their Consultant Performance Review score for the project.