



Construction & Materials Tips

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New Guide Schedule for Sampling and Testing

The process of implementing the new *2004 Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges* required writing and updating all the supporting documents. These included test methods, materials specifications, material producer lists, standard sheets, and the *Guide Schedule for Sampling and Testing*.

The *Guide Schedule for Sampling and Testing* is a guide for minimum project sampling and testing by TxDOT.

The *Guide Schedule for Sampling and Testing* could not be updated until the 2004 Specification Book was finalized so it would reflect requirements for all the new and revised specifications.

To support rewriting the *Guide Schedule for Sampling and Testing*, Research Project 1781, “Development of a Methodology to Determine the Appropriate Minimum Testing Frequencies for the Construction and Maintenance of Highway Infrastructure,” was conducted to examine minimum testing frequencies and the risk of either accepting materials that did not meet the requirements or rejecting materials that actually met the specifications.

The results are guide schedule minimum frequencies that give a good balance between over-testing and under-testing once a contractor has demonstrated that they are in control of the construction process.

While containing the minimum testing frequencies, the *Guide Schedule for Sampling and Testing* preamble recommends increasing the testing frequency at the start of a project to ensure the contractor is in control of processes and to set quality standards early. Additionally, highly variable materials warrant increased testing frequency.

Since TxDOT implemented the “Quality Assurance Program for Construction” and moved to the “systems approach” for independent assurance (IA), project IA testing is no longer required.

The *Guide Schedule for Sampling and Testing* is composed of:

- ◆ Preamble
- ◆ Table I, Embankments, Subgrades, Back Fill, and Base Courses
- ◆ Table IA, Asphalt Stabilized Base (Plant Mix)

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- ◆ Table II, Surface Treatments
- ◆ Table III, Hydraulic Cement Concrete – Structural (Classes: C, F, H, S, DC, CO, LMC, or SS)
- ◆ Table IV, Hydraulic Cement Concrete – Non-Structural Concrete – (Classes: A, B, D, E, or K)
- ◆ Table V, Hydraulic Cement Concrete Pavements
- ◆ Table VI, Asphalt Concrete Pavement (Items 341, 342, 344, and 346)
- ◆ Table VII, Asphalt Concrete Pavement (Items 330 and 334) and
- ◆ Table VIII, Asphalt Concrete Pavement (Item 340).

Using this guide schedule, along with engineering judgment, to establish a project testing and inspection plan can set the stage for a successful quality project.

The *Guide Schedule for Sampling and Testing* can be found on the TxDOT internet site at:
<http://www.dot.state.tx.us/business/materials.htm>.

Direct any questions about the *Guide Schedule for Sampling and Testing* or sampling and testing rates to David Belser at: dbelser@dot.state.tx.us or 512/506-5803 or to the appropriate CST M&P Branch Manager. The Branch Manager contact list by material is located at:
<http://www.dot.state.tx.us/cst/mat/contct.htm>.