

# WAQTC QUALIFICATION ADVISORY COMMITTEE MEETING MINUTES

**CHAIRMAN :** Garth Newman  
**FACILITATOR :**  
**RECORDER :** Garth Newman

**DATE :** January 23 thru 27, 2006  
**TIME :** Start 7 am each day

## MEMBERS PRESENT

Greg Chistensen, AKDOT-PF      Bob Briggs, WSDOT  
Desna Bergold, UDOT  
Sean Parker, ODOT  
Garth Newman, ITD  
Jeffery Rayman MTDOT

## GUESTS

Bruce Wasill – WFL -HD

## MEMBERS ABSENT

Joan Nakamura, HDOT                      David Belser TXDOT  
Alan Hotchkiss CDOT                      Brian Legan, NMSHTD

## **MEETING OBJECTIVE :**

1. AASHTO Test method review and revisions
2. Other issues
3. Work assignments

**PLEASE RESPOND TO YOUR ACTION ITEMS.**

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<b>ISSUE</b>	<b>DISCUSSION</b>	<b>DECISION</b>	<b>ACTION REQUIRED</b>
<b>1) AASHTO Revisions</b>  <b>A) Aggregate NMS</b>   <b>T 176</b>	<p>There seems to be a great deal of confusion about the definition of “Nominal Maximum Size”.</p> <p>The executive committee agreed to use the Superpave Definition in 1997. Not every member is doing this. Some are using the definition across the board others are only using the Superpave definition for HMA.</p> <p>The concern is with confusion on how to determine sample size and having a different definition for different aggregate type’s i.e. concrete, bases, HMA.</p> <p>Bob Briggs handed out a report he develop a few years ago on all the differing definitions of “Nominal Maximum Size”</p> <p>T 176 (sand Equivalent) is a very old method and doesn’t fit the set up of more recent methods</p> <p>In the procedure area there was a no explanation of where / how the sample is obtained.</p>	<p>The group asked Bob to update his report.</p> <p>This will be presented to the Executive committee to take to the AASHTO subcommittee to try to reduce these definitions to a single one.</p> <p>Create areas: Reference Documents Significance and Use &amp; Sampling</p>	<p><b>BOB BRIGGS</b> <b>DUE DATE</b> <b>3-1-06</b></p> <p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p>
<b>B ) Asphalt</b>  <b>T308</b> <b>Ignition Furnace</b>   <b>T 30</b> <b>Gradation</b>	<p>T 308 has been revised by AASHTO again. It was felt by the group that a complete revamp of the method was needed. The reasoning being that each year of its existence this method has been added to but it has never been looked at as a compete method. We found numerous areas where repetitious language occurred. This method didn’t flow well. Also it was apparent that in the correction factor section a tester couldn’t determine at what point an aggregate correction factor should be developed.</p> <p>T 30 does not include use of the aggregate from T 308 (the ignition furnace). It also does not refer to T 308 in any way. This method also has conflicting language or doesn’t contain language in T 27 and T 11</p>	<p>This method was completely reworked to create a better flow to the method and now more closely follows the AASHTO development guidelines If an aggregate was found to have breakdown concerns it should be evaluated the same way as the Asphalt binder correction factor is developed. Asphalt binder is affected by the furnace temperature and the length of time taken to burn the sample. This would be the same for aggregate.</p> <p>This method was modified to represent aggregate taken from T 308 Language imported From T 11 &amp; T 27</p>	<p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p> <p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p>

ISSUE	DISCUSSION	DECISION	ACTION REQUIRED
<p><b>T 329</b> <b>Moisture</b></p>	<p>This is a new method developed from an OLD WAQTC method.</p> <p>A larger sample size is needed. Temperatures on constant mass needs to be lowered. We can heat the sample up to 230° +- 9° F without damaging the mix.</p>	<p>Revise sample size. When calculating and reporting moisture content to 0.01 % you must have at least a 1000 g sample. This moisture content is subtracted from the Asphalt binder content (0.01%)</p> <p>Temperature was lowered because Asphalt binder can be lost when using (AC 2.5 or AC 5) which Alaska uses. Lower limit (221° F) however doesn't exceed JMF mixing Temp.</p>	<p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p>
<p><b>T328</b> <b>Splitting</b></p>	<p>This is a new method developed from a OLD WAQTC method. But did not include methods use by WAQTC members.</p>	<p>We moved all the mechanical splitters together.</p> <p>Added a quartering method (quartering once)</p> <p>Added incremental method (WaDOT Loaf method)</p> <p>Find old report on Loaf method</p>	<p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p> <p><b>BOB BRIGGS</b> <b>DUE DATE</b> <b>3-1-06</b></p>
<p><b>T 166</b> <b>Bulk Gravity</b></p>	<p>The sample drying time once the puck in removed from the bath was very loose (as quickly as possible)</p>	<p>Defined as quickly as possible</p>	<p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p>
<p><b>T209</b> <b>Max Gravity</b></p>	<p>The table in 209 said "Largest Particle Size" which has no definition</p>	<p>Change to Nominal Maximum Size and Superpave definition. This matches other HMA procedures</p>	<p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p>

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<p><b>C ) Concrete</b>  <b>T 23</b> <b>Cylinders</b>          <b>T 309</b> <b>Temperature</b></p>	<p>A large amount of discussion revolved around T23 Making Cylinders. There is a real issue about the times involved with initial cure and when cylinders can be transported.</p> <p>Calibration doe not match R18</p>	<p>We recommend that the executive committee members meet with their prospective construction sections and have a requirement placed in the spec books that; “Set Time” be required with every mix design submission.</p> <p>This is because the cylinders can not be transported until 8 hours after final set</p> <p>Change to match R 18 and remove only glass liquid type.</p>	<p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p> <p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p>
<p><b>D)</b> <b>Embankment</b>  <b>T 99 &amp; 180</b>       <b>T 272</b> <b>One Point</b> <b>Curves</b></p>	<p>Only metric. How to calibrate the volume of the mold is no correct. Calculating wet density needs to be revised to a division process. How to fill surface voids after you strike the top of the mold off.</p> <p>AASHTO T 272 is a problem area. There are no guidelines on how to determine what family of curves to use and how to develop a family of curves. Sean Parker Worked on a document that we reviewed</p>	<p>Incomplete</p> <p>Put this document in the FOP and use it for a couple of years to further refine it before submitting it to AASHTO Sean will work up a Power Point Presentation</p>	<p><b>GREG</b> <b>CHRISTENSEN</b> <b>DUE DATE</b> <b>?</b></p> <p><b>SEAN PARKER</b> <b>DUE DATE</b> <b>July meeting</b></p>
<p><b>2)</b> <b>Other Issues</b> Coring Superpave</p>	<p>There was quite a bit of discussion last meeting about each state having its own HMA coring test method. Bob Briggs developed a draft coring method for review. This would become WAQTC TM 11.</p>	<p>Method draft developed and sent to Executive committee for approval.</p>	<p><b>GARTH NEWMAN</b> <b>to Executive</b> <b>Committee</b></p>

Mixing HMA			
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<p>2) <b>Other Issues Superpave</b></p> <p><b>Mixing to produce HMA</b></p>	<p>Discussion about revival of a Superpave module. A Superpave module was developed by UNR and was piloted in Utah. UDOT felt that it missed the mark and took on the task of revising it. UDOT has been teaching this module successfully for 3 years.</p> <p>While working on AASHTO T 308 it became apparent that the physical part of mixing specimens for the calibration samples or Superpave gyratory specimen.</p> <p>The difficulty comes on how to build the aggregate gradation. Many of the WAQTC agencies have their own methods either written down. along with a method for Hveem. However Superpave does not cover this in SP-2.</p>	<p>Desna will sent the module to each of the QAC team for review</p> <p>Review every ones criteria and make a recommendation for a new AASHTO Test method for blending aggregates to produce HMA test specimens.</p> <p>Submit to Garth by February 15<sup>th</sup> your agencies method for aggregate blending.</p> <p>Contact ARML for their procedure. Contact NIAT for their blending procedure. Contact John Epps to confirm how Westrac blended samples.</p> <p>Compile methods &amp; review compilation at July meeting</p>	<p><b>DESNA BERGOLD to QAC members</b></p> <p><b>ALL MEMBERS</b></p> <p><b>GARTH NEWMAN</b></p>
	<p><b>Garth to send all revised test methods to QAC members with expectation they will review with their AASHTO assigned Engineer</b></p>		
<p><b>QAC Next Meeting</b></p>	<p><b>SECOND OR THIRD WEEK OF JULY</b></p>	<p>Recommend Coeur'd Alene again to Executive committee.</p>	<p><b>GARTH NEWMAN to Executive Committee</b></p>