

WAQTC QAC COMMITTEE MEETING MINUTES

LEADER: Garth Newman, ITD FACILITATOR: Desna Bergold RECORDER:	DATE: JANUARY 28 THRU FEBRUARY 1, 2013 TIME: 1:00 TO 5:00 PM 1/28, 8:00 AM TO 5:00 PM 1/29 THRU 1/30, 8:00 AM TO 12:00 NOON 2/1 LOCATION: DENVER CO
MEMBERS: Garth Newman, ITD Sean Parker, ODOT Wendy Tripp, UDOT Ryan Hixson, WFL-HD Bob Briggs, WSDOT	ABSENT: Linda Hughes, WSDOT Brian Legan, NMDOT

- MEETING ITEMS:**
1. AASHTO T 22 descriptions with the break diagrams – from Executive Committee
 2. Sean’s concerns with TP XX (TM 8) – from August meeting
 - a. Additional related item: TM 11
 3. AASHTO T 166 – counter revision to change discussed at 2012 AASHTO SOM (see August minutes)
 - a. Review 2010 proposed change to layout that was not incorporated
 4. T 269 calculates voids differently than R 35 – August meeting Constant Mass recommendations
 5. T 248 2011 revision issues
 6. T 209 – Linda and Misty – from January 2012
 - a. Review 2010 proposed changes that were not incorporated
 7. T 99/T 180 / T 224 – Garth
 8. T 272 – Garth
 9. T 310 from 2012 meeting
 10. AASHTO methods that should have dual units – Executive Committee
 11. AASHTO R 60-12 – propose a single location in the middle third of the load – Executive Committee
 12. AASHTO eliminated T 309
- WAQTC Issues
13. Possible inclusion of T 196; Air Content of Freshly Mixed Concrete by the Volumetric Method – Wendy
 14. Does TM 2 need to change – Executive Committee
 - a. questionnaire
 15. Qualification numbers:
 - a. Assigning qualification numbers
 - b. Tracking individuals that have moved / relocated (temporarily i.e. 2 or 3 years)
 - c. Single qualification number
 - d. Multiple data bases
 - e. Suspensions
 16. T 152 – should the standardization frequency be changed to agree with R 18 – EC meeting dated 11/2
 17. Agency experiences performing laboratory reviews on laboratories that are AMRL and CCRL inspected - Bob
 18. Style Guide – any update before it is posted to the website? -
 19. TM 13 Performance Exam – Garth
 20. Possible additions to WAQTC FOPs – Sean

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
AASHTO T 22	<p>ASTM has descriptions accompanying the break diagrams; the Executive Committee (EC) thought this would be a good addition to <i>T 22; Compressive Strength of Cylindrical Concrete Specimens</i>. The QAC agreed and added similar descriptions to the AASHTO procedure. Revised procedure will be presented to the Executive Committee for approval and proposal to AASHTO.</p> <p><i>Revisions will be presented to the Executive Committee in April.</i></p>	Garth Newman
Sean's concerns with TP XX (TM 8) – from August meeting	<p>The group has been working toward proposing <i>WAQTC TM 8, In-Place Density of Bituminous Mixes Using the Nuclear Moisture-Density Gauge</i> to AASHTO. Sean Parker, ODOT, had brought up some comments to be discussed at the August, 2012 meeting and they were tabled until this meeting.</p> <p>The group decided that the core correlation section should be an appendix.</p> <p>Changes to the TP were made based on the discussion. Revisions are tracked on TP XX (TM 8) document.</p> <p><i>Desna will move the core correlation section to an Appendix. Updated TP XX (TM 8) will be presented to the Executive Committee.</i></p> <p>Many other changes were approved to the TM that should be incorporated into the FOP for TM 8.</p> <p><i>Put revisions from TP XX to TM 8 on the agenda for the July meeting.</i></p>	Desna Bergold & Garth Desna
TM 11	<p>During the course of discussing changes to TM 8 the group decided to review and update <i>TM 11, Sampling Hot Mix Asphalt (HMA) After Compaction (Obtaining Cores)</i> which is in development to present to AASHTO.</p> <p>The group decided that the thickness determination section should be an appendix.</p> <p>Changes to the TP were made based on the discussion. Revisions are tracked on TP XX (TM 11) document.</p> <p>The revisions to the need to be incorporated into TM.</p> <p><i>Put revisions from TP XX to TM 11 on the agenda for the July meeting.</i></p>	Desna
AASHTO T 166	<p>At the 2012 AASHTO SOM meeting there were significant changes proposed to T 166 and they were included on the 2012 ballot. The group reviewed the changes.</p> <p><i>No action required.</i></p>	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
AASHTO T 269	<p><i>T 269; Percent Air Voids in Compacted Dense and Open Asphalt Mixtures</i> uses a mathematically correct equation to calculate air voids but the QAC feels it is not as easy to teach and perform as the equation in the WAQTC FOP. They would like to propose inclusion of an alternate equation.</p> <p>Current equation:</p> $V_a = 100 \left(1 - \left(\frac{G_{mb}}{G_{mm}} \right) \right)$ <p>Proposed equation:</p> $V_a = 100 \left(\frac{G_{mm} - G_{mb}}{G_{mm}} \right)$ <p>Also propose adding symbols for air voids (V_a), and the specific gravities (G_{mb} and G_{mm}) throughout the procedure.</p> <p><i>Revisions will be presented to the Executive Committee in April.</i></p>	Garth Newman
New equation and in R 35	<p>During the discussion of T 269, the group identified the same issue with <i>R 35, Superpave Volumetric Design for Hot Mix Asphalt (HMA)</i>. They would like to propose the same alternate equation.</p> <p>In reviewing this test method it was apparent that the method is inconsistent in its use of the symbols and acronyms that were established with the Superpave method.</p> <p>The group would like input from Tom Baker, WSDOT, and chair of Tech Section 2d before proposing changes to the EC.</p> <p><i>Garth and Bob Briggs, WSDOT will discuss the inconsistency in use of acronyms and symbols with Tom Baker. They will report outcome via email.</i></p> <p><i>Agenda item for January 2014.</i></p>	Bob Briggs and Garth Desna
T 209	<p>At the 2012 meeting the group decided that <i>T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Hot Mix Asphalt (HMA)</i> should separate and more completely cover the sample preparation for laboratory prepared specimens and field sampled. The changes were made and proposed to the group. While revising the procedure it was discovered that the changes proposed in 2010 were not included. According to WAQTC documents the changes were approved at the AASHTO SOM for concurrent ballot. It is unknown if they were included on the ballot or were not passed.</p> <p>There has been much discussion about the limited the instructions for standardization of the flask for mass determination-in-air. The group</p>	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
	<p>thinks that there are some points that need to be clarified.</p> <p>They would like to ask AASHTO states that use T 209 how often and what their procedure is for standardizing the flask. The question they are seeking answers for are:</p> <p style="padding-left: 40px;">When using the determination in air method how often is the flask standardized and checked?</p> <p style="padding-left: 40px;">Is the flask standardized at $25 \pm 0.5^{\circ}\text{C}$ ($77 \pm 0.9^{\circ}\text{F}$) or at a range of temperatures?</p> <p style="padding-left: 40px;">How many replicates at each temperature is required?</p> <p style="padding-left: 40px;">What is the allowable range of the replicate determinations?</p> <p style="padding-left: 40px;">What do you do and why?</p> <p style="padding-left: 40px;">WAQTC would like to add language in T 209 to clarify the standardization and check procedure. (8.2 and 8.4)</p> <p>Perhaps AASHTO could use their listserv to poll the states.</p> <p><i>Ask the Executive Committee to assign a member to bring this forward at the SOM to poll the states through the listserv.</i></p> <p>There was also much discussion of whether the standardization procedure should be moved to an annex. If not should it be before the ‘Sampling’ section?</p> <p>The group would also like Tom Baker’s input on the proposed changes and the 2010 changes that were not incorporated.</p> <p><i>Garth and Bob will discuss the proposed changes and the 2010 changes and the potential for changes in 2014 (results from poll and moving standardization to an annex) with Tom. Report at the next quarterly meeting (conference call).</i></p> <p><i>Desna will request each QAC state’s standardization procedure and disseminate the for information</i></p>	<p>Garth</p> <p>Garth and Bob</p> <p>Desna</p>
Related item	<p>AASHTO does not have a standalone procedure for mixing HMA in the laboratory. There are some incomplete instructions in various procedures that are not consistent. The group would like to explore the possibility of developing a procedure for laboratory mixing of HMA.</p> <p>Garth will look at MS 2 and determine if mixing is covered there. He will also contact a Tom Harmon of FHWA’s Expert Task Group (ETG) to find out if there is anything being done to address this issue.</p>	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
	<p>Review for information:</p> <ul style="list-style-type: none"> • T 245, Resistance to Plastic Flow of Bituminous Mixtures Using the Marshall Apparatus • T 308; Determining the Asphalt Binder Content of Hot Mix Asphalt (HMA) • T 312; Preparing and Determining the Density of Hot Mix (HMA) Specimens by Means of the Superpave Gyratory Compactor • T 246; Resistance to Deformation and Cohesion of Hot Mix Asphalt (HMA) by Means of Hveem Apparatus • T 247; Preparation of Test Specimens of Hot Mix Asphalt (HMA) by Means of the California Kneeding Compactor <p><i>Garth will follow up and this will be included on the July agenda.</i></p>	Garth and Desna
T 99 / T 180 / T 224 T 272	<p>Garth reported that all of these test methods were being reviewed by an AASHTO technical work group. WAQTC should wait to work on them until the work group has made their recommendations.</p> <p><i>No action required.</i></p>	
T 310	<p>Desna reported the outcome of the proposals for <i>T 310; In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)</i>. AASHTO SOM TS 1b. Approved the proposal and this has been balloted.</p> <p><i>No action required</i></p>	
AASHTO methods that should have dual units	<p>The QAC has noticed that many of the AASHTO test methods do not follow the AASHTO Style Guide when using dual units of measurement. The AASHTO SOM has assigned a Task Force to address this issue. Cole Mullis, ODOT is a member of the task force and has asked the QAC to provide a list of test methods that need to be considered.</p> <p>After looking at the AASHTO test methods a list was compiled of test methods that have dual units that are not consistent with the AASHTO Style Manual i.e. US Customary with SI in parentheses or brackets or a mixture of uses.</p> <p>The list was reviewed by the committee and approved to forward to the EC.</p> <p><i>List will be presented to the Executive Committee at the Spring Meeting.</i></p>	Garth
TM 2 – R 60	<p>Garth summarized the discussion during the Executive Committee teleconference in November.</p> <p>Recently many WAQTC member states have been told by CCRL inspector's that <i>TM 2, Sampling Freshly Mixed Concrete</i> does not meet the requirements of <i>ASTM C 1077; Standard Practice for Agencies</i></p>	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
	<p><i>Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation.</i> AMRL uses CCRL inspection for concrete accreditation. CCRL uses ASTM C 1077 requirements. C 1077 requires technician to be qualified in ‘<i>Sampling, Practice C172 and Air Content, Test Method C173/C173M</i>’ (volumetric method). AMRL does not use CCRL for any other accreditation than concrete which is why this has not become an issue with aggregate accreditation.</p> <p>The QAC has found that most of the labs that qualify their technicians according to WAQTC are seeking AASHTO accreditation through AMRL. AASHTO accreditation requires the lab to comply with the requirements of AASHTO R 18. R 18 requires the lab to qualify in only the procedures that they perform (see excerpt from AAP Procedure manual below). But since AMRL uses CCRL the CCRL inspectors are referencing ASTM C 1077 for their requirements. ASTM C 1077 requires the lab to qualify in ASTM procedures, specific to this issue are <i>ASTM C 172, Sampling of Fresh Hydraulic Concrete</i> and <i>ASTM C 173 Air Content of Freshly Mixed Concrete by the Volumetric Method</i> but CCRL accepts AASHTO R 60 and AASHTO T 196 respectively as equivalents. Many WAQTC labs do not perform either procedure nor do they have ASTM procedures available.</p> <p>In the past CCRL has given labs non-compliance in these areas and the lab has responded to AMRL that the lab does not perform those methods and does not wish to be accredited in them. AMRL then issued accreditation in the procedures that the lab performs. The QAC would like to send a letter to AMRL hoping that AMRL will state their response globally instead of individually so that the WAQTC member states would have that guidance.</p> <p>To summarize, the CCRL inspectors are telling laboratories they cannot get accredited in something they were not seeking to get accredited in, C 1077, an option that has additional requirements.</p> <p>ITD is currently in this process and Garth will report AMRL’s response.</p> <p>Excerpt from the AASHTO Accreditation Program Procedures Manual:</p> <p style="padding-left: 40px;">AASHTO accreditation requires a laboratory to comply with the requirements of AASHTO R18, "Recommended Practice for Establishing and Implementing a Quality System for Construction Materials Testing Laboratories." At the option of the laboratory, by meeting additional requirements, accreditation can be extended to include recognition of a laboratory's compliance with the following standards:</p> <p style="padding-left: 40px;">ASTM C1077 - Standard Practice for Laboratories</p>	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
-------	------------------------------	---------------------

	<p>Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation, Etc.</p> <p>Link: http://www.amrl.net/AmrlSitefinity/Libraries/AMRL_Document_Library/AAP_Procedures_Manual.sflb.ashx</p> <p>Accreditation issues: Using CCRL for concrete inspection has caused issues due to CCRL's use of C 1077 for the standard even if the laboratory is not intending to get accredited in C 1077 just the test procedures they perform.</p> <p><i>Drafted a letter to AMRL and requested review from Matt Strizich, Executive Committee Chair to review and send to Stephen Lenker, P.E. Director – Construction Materials Reference Laboratory and Brian Johnson AASHTO Accreditation Program Supervisor (AMRL/CCRL).</i></p> <p>The group discussed possible proposed changes to AASHTO R 60, Sampling of Freshly Mixed Concrete. i.e. one sample increment instead of the required two or more. This issue was tabled because the revisions are extensive essentially changing the bulk of the transit mixer sampling procedure. The group identified that R 60 also does not include sampling from a pump or conveying system which should be added but is addressed in TM 2.</p> <p>The group discussed a 'sampling poll' and could not determine how and who to poll to get a reliable, accurate response.</p> <p><i>No action taken</i></p>	<p>QAC for Matt Strizich signature</p>
<p>Constant Mass</p>	<p>In the January 2012 meeting the group discussed AASHTO's use of the term 'constant mass' and the fact that the term is frequently used without a complete definition. Assignments were made for QAC member to review by by SOM tech sections.</p> <p>Ryan Hixson, WFL-HD – TS 2d, three that need to be addressed Alan Hotchkiss, CDOT – TS 1b, six that need to be addressed Greg Christensen, AkDOT– TS 1c, twenty that need to be addressed</p> <p>Wendy Tripp, UDOT; Misty Miner, MDT; Linda Hughes, WSDOT; – TS 2c, three that need to be addressed Garth Newman, ITD– TS 2d, three that need to be addressed</p> <p>The group intends to propose changes to procedures of one Tech Section this year. TS 2c was chosen because of its high attendance at the SOM meetings. The rest of the procedures to be addressed at another time.</p> <p>Sections to be modified:</p> <ul style="list-style-type: none"> • T 287; Asphalt Binder Content of Asphalt Mixtures by the 	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
	<p>Nuclear Method</p> <ul style="list-style-type: none"> • T 305; Determination of Draindown Characteristics in Uncompacted Asphalt Mixtures • T 319; Quantitative Extraction and Recovery of Asphalt Binder from Asphalt Mixtures <p>These sections were modified and will be proposed to the EC.</p> <p><i>Revisions will be presented to the Executive Committee in April.</i></p>	Garth
T 309	<p>AASHTO T 309 was discontinued. The committee wrote a letter to the EC expressing their concerns body reprinted below:</p> <p>This committee has identified significant issues with AASHTO's elimination of <i>T 309, Temperature of Freshly Mixed Hydraulic Cement Concrete</i> In the 32nd edition. Issues that were caused by eliminating T 309 and referencing ASTM C 1064:</p> <ul style="list-style-type: none"> • ASTM C 1064 references ASTM test methods not AASHTO methods such as referencing C 172 for sampling fresh concrete instead of R 60. • The ASTM test procedure is not available to field testing technicians without additional cost to the agency even though the AASHTO manual has already been purchased. • Individual agencies may opt to develop independent procedures to avoid the above issues. This could create a potential liability for the agency; individual procedures would be more difficult to legally defend. • The references to the eliminated procedure need to be found throughout the AASHTO procedures and changed to the ASTM reference. <p>AASHTO has many other 'C' methods that they may eliminate; see the ASTM/AASHTO questionnaire in the SOM team website from 2007. The AASHTO SOM Tech Sections will determine if a method is to be redeveloped as an AAASHTO 'A' procedure or eliminated, for each of the methods that are eliminated the potential for problems increase for every AASHTO member state. Methods of immediate concern are <i>AASHTO T 2, Sampling of Aggregates</i> in TS 1c, and <i>AASHTO T 40, Sampling Bituminous Material</i> which is in TS 2a. Elimination of these procedures would cause similar issues to those listed above and potentially more that have yet to be identified.</p> <p>With direction from the Executive Committee the QAC would be willing to develop AASHTO 'A' procedures for the above methods to propose to the AASHTO SOM for adoption.</p>	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
--------------	-------------------------------------	--------------------------------

	<i>Drafted and sent letter to Executive Committee.</i>	ALL
<p>Possible inclusion of T 196</p> <p>Possible additions to WAQTC FOPs – also discussed</p>	<p>Wendy would like to explore the possibility of adding a section to the WAQTC for <i>T 196; Air Content of Freshly Mixed Concrete by the Volumetric Method</i> as an optional piece for the states to use.</p> <p>The group discussed the possibility of beginning a WAQTC library with FOPs and test questions, etc. of AASHTO test methods as options for states to use for training and qualification. This is also related to Sean’s agenda item. One question is ‘does the organization want to expend energy and funds for FOPs that only some states will use?’</p> <p>Some of the benefits of developing a library of WAQTC test methods:</p> <ul style="list-style-type: none"> • WAQTC FOPs are easier to train and for the technician to use. • Standardized FOPs for states optional use would create consistency among the states that are using it. • It will save individual states repeating the effort and expense of developing FOPs or state test methods they need. <p>If this effort is pursued one issue is to be certain the core program gets full attention and any additional work does not interfere.</p> <p>The state requesting a test method may need to develop the FOP draft package and present it to the group. The group effort may need to be separate from the standard July and January working meetings. This most likely could be dealt with as a webinar.</p> <p>If this moves forward, at a minimum an FOP and a performance exam should be developed. The methods that ODOT has begun to develop are:</p> <ul style="list-style-type: none"> • T 84; Specific Gravity and Absorption of Fine Aggregate • T 283; Resistance of Compacted Hot Mix Asphalt (HMA) to Moisture-Induced Damage. <p>UDOT and MDT intend to develop T 196 as soon as possible.</p> <p>Other methods that the group would like to eventually develop are:</p> <p>Concrete:</p> <ul style="list-style-type: none"> • T 22; Compressive Strength of Cylindrical Concrete Specimens • T 231; Capping Cylindrical Concrete Specimens • ASTM C 1231; Standard Practice for Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders • M 201; Mixing Rooms, Moist Cabinets, Moist Rooms, and Water Storage Tanks Used in the Testing of Hydraulic Cements and Concretes <p>Concrete aggregate:</p> <ul style="list-style-type: none"> • T 112; Clay Lumps and Friable Particles in Aggregate 	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
	<ul style="list-style-type: none"> • T 104; Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate • T 96; Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine <p>Other test methods for laboratory accreditation:</p> <ul style="list-style-type: none"> • T 19; Bulk Density (“Unit Weight”) and Voids in Aggregate • TP 83; Sampling and Fabrication of 50-mm (2-in.) Cube Specimens Using Grout (Non-Shrink) or Mortar • ASTM C 535; Resistance to Degradation of Large-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine <p>The group feels that this effort is consistent with the following goals of the Strategic Plan:</p> <ul style="list-style-type: none"> • Provide a forum to promote uniform test standards • Provide highly skilled, knowledgeable materials sampling and testing technicians • Provide reciprocity for qualified testing technicians among accredited Agencies <p>The QAC would like the Executive Committee to decide if this is something they would approve and if so determine if they are willing to fund the effort through assistance of the consultant.</p> <p><i>The concept of adding FOPs and performance exams will be presented to the Executive Committee.</i></p>	Garth
T 152	<p>The Executive Committee discussed the language for standardization of the air meter in the FOP for <i>T 152 Air Content of Freshly Mixed Concrete by the Pressure Method</i>. The FOP states ‘Standardization shall be performed at the frequency required by the agency.’ The concern is that this frequency is different than stated in <i>R 18; Establishing and Implementing a Quality Management System for Construction Materials Testing Laboratories</i>. R 18 requires standardization at least every three months. The Executive Committee asked the QAC to determine if it was appropriate to change the FOP to agree with R 18.</p> <p>The QAC agreed that the FOP should be changed. The FOP for T 152 will be updated in October 2013 to read ‘Standardization shall be performed at a minimum every three months.’ A new written exam question addressing this will be developed by Alan.</p> <p><i>The frequency for air meter standardization in the FOP for T 152 will be changed to agree with R 18.</i></p> <p><i>A new written exam question addressing this will be developed by Alan.</i></p>	All Alan Hotchkiss

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
Technician Qualification numbers	<p>The administration manual does not specifically address:</p> <ol style="list-style-type: none"> Assigning qualification numbers Tracking individuals that have moved / relocated (temporarily i.e. 2 or 3 years) Single qualification number Multiple data bases Suspensions <p>At this time some states are using a single qualification number across multiple agencies and some states assign a new number. There is some confusion in this system which could become a major issue when a technician is suspended. Garth wanted to explore a way to begin using a single qualification number throughout the member states. There is perhaps a possibility in the future. At this time MTD and ODOT cannot enter numbers into the database outside of their assigned number range. (Administration Manual pg. 30)</p> <p><i>Review the Administration Manual and develop language to address this issue. Desna will identify specific section(s) for review.</i></p>	Desna All
Reviews on AMRL accredited labs	<p>Discussion item: WSDOT has noticed that when reviewing AMRL accredited private labs they have found there are some with unacceptable equipment and practices. He asked if anyone else has had similar issues.</p> <p>Most states do inspect or review private labs and there have been some with exceptions.</p> <p><i>No action required.</i></p>	
Style Guide	<p>Reviewed the current draft.</p> <p><i>Present to the Executive Committee for approval prior to posting on the website.</i></p>	Garth
TM 13 Performance Exam	<p>TM 13 the DP (Dust-to-(effective) binder) formula needs to list the P_{be} in the variables definitions.</p> <p><i>Corrections made to TM 13.</i></p> <p>Revisions made to the performance exams.</p> <p><i>Revisions will be sent to QAC members for inclusion in current training materials.</i></p>	Desna
Other	<p>Discussion item: UDOT would like to pursue the Go No-go device with AASHTO. Wendy has proposed to UDOT materials that they perform a study comparing the results of a Go No-go analysis on a test stack and then use the caliper analysis and determine the variability.</p> <p>MDT explained the method / tool they use, a gauged flat bar that is used</p>	

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
	<p>to measure each direction of the opening. The group also discussed the requirements of AASHTO which requires a measurement be taken and documented.</p> <p><i>AASHTO M 92; Wire-Cloth Sieves for Testing Purposes</i> is ASTM E 11 and will soon no longer be represented in the AASHTO manual. If there were to be any changes to M 92 proposed to AASHTO a standalone specification will have to be developed.</p> <p><i>QAC provided input and suggestions for further UDOT action.</i></p>	
	<p>The QAC quarterly teleconference needs to be scheduled.</p> <p>Desna will ‘Doodle’ for April Teleconference May 1 and 2, after Spring meeting.</p> <p><i>The QAC will schedule a teleconference after the spring Executive Committee.</i></p> <p><i>Next in person meeting Week of July 22nd Vancouver WA</i></p>	Desna

ISSUE	DISCUSSION / <i>DECISION</i>	ACTION REQUIRED BY:
--------------	-------------------------------------	--------------------------------