

WAQTC EXECUTIVE BOARD

2022 SPRING MEETING MINUTES

MEETING CALLED BY: LARRY ILG, CHAIR
RECORDER: DESNA BERGOLD, COORDINATOR

DATE: March 27th and 28th, 2022
TIME: 1:00 TO 5:00 PM, 8:00 AM TO 12:00 PM PST
LOCATION: WESTIN LONG BEACH, CA, AND TEAMS MEETING

ATTENDEES:
 LARRY ILG, ODOT, CHAIR
 L. SCOTT NUSSBAUM, TREASURER, UDOT
 CRAIG WIEDEN, CDOT
 MICHAEL VOTH, CFLHD
 CHAD CLAWSON, ITD
 OAK METCALFE, MDT
 MATT LINNEMAN, NDDOT
 GARRETT WEBSTER, WSDOT
 SEAN PARKER, ODOT, QAC CHAIR
 DESNA BERGOLD, COORDINATOR

INVITED GUEST:
 MISTY MINER, MDT, QAC VICE CHAIR
ABSENT:
 MIKE SAN ANGELO, AKDOT & PF, VICE CHAIR
 BRIAN IKEHARA, HDOT

Agenda Items / Objectives:

1. Report on 2019 AASHTO proposals

- a. *R 25, Technician Training and Qualification Programs (TS 5c)* – Champions Scott Nussbaum and Sean Parker – almost complete
- b. *T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop (TS 1b)* – complete
- c. *T 176; Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test (TS 1a)* – Champion Sean Parker – approved on COMP ballot
- d. *T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop (TS 1b)* – complete
- e. *T 310; In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) (TS 1b)* – complete

2. Report on 2020 AASHTO proposals:

- a. *R 35, Superpave Volumetric Design for Asphalt Mixtures (TS 2d)* – Champion Oak Metcalfe
- b. *R 100, Making and Curing Concrete Test Specimens in the Field (TS 3b)* – Champion Sean Parker - complete
- c. *T 30; Mechanical Analysis of Extracted Aggregate (TS 2c)* – Champion John Bilderback – complete
- d. *T 85, Specific Gravity of Coarse Aggregate (TS 1c)* – Champion John Bilderback – complete
- e. *T 88, Particle Size Analysis of Soils (TS 1a)* – Champion Sean Parker – complete

- f. *T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric of Concrete)* (TS 3b) – Champion Sean Parker – complete
- g. *T 152, Air Content of Freshly Mixed Concrete by the Pressure Method* (TS 3b) – Champion Sean Parker – complete
- h. *T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens* (TS 2c) – Champion Larry Ilg – complete
- i. *T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures* (TS 2c) – Champion Larry Ilg – approved on concurrent ballot
- j. *T 272; One-Point Method for Determining Maximum Dry Density and Optimum Moisture* (TS 1b) – Champion Matt Linneman – complete
- k. *T 283, Resistance of Compacted Asphalt Mixtures to Moisture* (TS 2d) – Champion Oak Metcalfe – complete
- l. *T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method* (TS 2c) – Champion Oak Metcalfe – complete
- m. *T 312, Asphalt Mixture Specimens by Means of the Superpave Gyrotory Compactor* – complete
- n. *T 329, Moisture Content of Asphalt Mixtures by Oven Method* (TS 2c) – Champion John Bilderback – complete
- o. *T 331, Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method* (TS 2c) – Champion Larry Ilg – complete

3. Report on 2021 Proposed AASHTO:

- a. *R 47, Reducing Samples of Asphalt Mixtures to Testing Size* (TS 2c) – Champion Larry Ilg – repropose revisions in 2022
- b. *R 76, Reducing Samples of Aggregate to Testing Size* (TS 1c) – Champion formerly John Bilderback
- c. *T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test* (TS 1a) – Champion Sean Parker
- d. *T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)* (TS 1b) – Champion Matt Linneman – approved on concurrent ballot
- e. *T 355, In-place Density of Asphalt Mixtures by Nuclear Methods* (TS 2c) – Champion Matt Linneman – approved on concurrent ballot

4. 2022 Proposed AASHTO revisions from the QAC:

- a. *R 47, Reducing Samples of Asphalt Mixtures to Testing Size* (TS 2c) – Champion Larry Ilg (TS 2c) – revisions in response to TS Ballot of R 76 (3/4)
 - b. *R 76, Reducing Samples of Aggregate to Testing Size* (TS 1c) – revisions to address TS Ballot (3/4)
 - c. *T 30; Mechanical Analysis of Extracted Aggregate* (TS 2c) (3/4)
 - d. *T 112, Clay Lumps and Friable Particles* (TS 1c) (3/4)
5. Reciprocity questionnaire (3/8)
 6. Process for Revision Proposals to AASHTO Standards (3/8) – QAC
 7. Request use of Figure 2 of AASHTO T 152 – QAC
 8. Administration Manual and RPIH (3/8) – revisions from QAC
 9. Funding and Budget – Scott Nussbaum
 10. Kryterion progress – Scott Nussbaum and Randy Mawdsley

11. Strategic Plan (3/2)

- a. Long term goals
 - i. Online training – WAQTC YouTube Channel – QAC
 - ii. Randomly generate questions – potential issues
- b. 2022 Planned Work
- c. Continue work on ‘on-going’ activities.
 - i. Evaluate existing training materials for needed improvements / updates.
 - ii. Member teleconferences to share developments in training and certification platforms.
 - iii. Investigate virtual written examinations (Kryterion)
 - iv. Thoroughly review testing methodology – complete
 - v. Develop written exam to comply with ASTM D3740 – complete

12. Brochure and Benefits of becoming a member

13. Other items

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Topic	Discussion / <i>Decision</i>	Action Required by:
WELCOME	<p>Larry Ilg, ODOT and Executive Board Chair, welcomed everyone, including those attending virtually, to the meeting.</p> <p>The meeting began with an update on the previously proposed revisions to AASHTO Standards.</p>	
REPORT ON 2019 AASHTO PROPOSALS		
R 25	<p><i>R 25, Technician Training and Qualification Programs (TS 5c) – Champions Scott Nussbaum and Sean Parker – partially complete</i></p> <p><u>Status of previous proposal</u></p> <p>In 2015, WAQTC proposed revisions to R 25. The revisions included adding references in the Appendixes and the reference section, removing ‘flexible’ from Section 3.1, and adding ‘subordinates’ in Section 7.2, <i>Examination, Controls, and Integrity</i>. The 2015 proposed revisions were lost and were re-proposed in 2019. Some of these revisions were published as editorial. The Technical Subcommittee (TS) Chair determined that the addition of ‘subordinates’ in the Section 7.2 is not editorial. The addition was balloted and approved. This revision should be published in the <i>2022 AASHTO Standards</i>.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p> <p><i>Desna will verify the remaining revisions are published.</i></p>	DESNA BERGOLD
T 99/T 180	<p><i>T 99, Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop (TS 1b) – complete</i></p> <p><i>T 180, Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop (TS 1b) – complete</i></p> <p><u>Status of previous proposals</u></p> <p>In 2019, WAQTC proposed revisions to T 99 and T 180 to replace the variables for density, <i>W</i> and <i>D</i>, with ρ, in calculations. This was approved as an editorial. These revisions were published in the <i>2021 AASHTO Standards</i>.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	

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Topic	Discussion / <i>Decision</i>	Action Required by:
T 176	<p><i>T 176; Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test (TS 1a) – Champion Sean Parker</i></p> <p><u>Status of previous proposal</u></p> <p>In 2019, WAQTC informed the TS 1a Chair that there were discrepancies in the description and figures of the apparatus.</p> <p>In 2021, WAQTC proposed removing the second sentence in 6.2 and revising the sample size in Section 6.4 to ‘1000 to 1500 g (2.2 to 3.3 lb.).’ These revisions were approved on Committee on Materials and Pavement (COMP) Ballot and should be published in the 2022 AASHTO Standards.</p> <p>Sean Parker, ODOT and QAC Chair, said that this was a good example of WAQTC working with the Standard’s Steward, Edward Inman, New Jersey, and the TS 1a Chair, Andy Babish.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 310	<p><i>T 310; In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) (TS 1b) – complete</i></p> <p><u>Status of previous proposals</u></p> <p>In 2019, WAQTC proposed revisions to T 310. Replacing the variables W and D with ρ to represent density in calculations. This was approved as an editorial. These revisions were published in the 2021 AASHTO Standards.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
REPORT ON 2020 AASHTO PROPOSALS		
R 35	<p><i>R 35, Superpave Volumetric Design for Asphalt Mixtures (TS 2d) – Champion Oak Metcalfe</i></p> <p><u>Status of previous proposals</u></p> <p>In 2020, WAQTC proposed revising SP 2 to MS 2, this was published in the 2021 AASHTO Standards but the title is incorrect, ‘Superpave Mix Design.’</p> <p>Oak Metcalfe, MDT, and TS 2d Chair, said that this reference will be removed in the next publication.</p> <p><i>Discussion only, no action required.</i></p>	

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Topic	Discussion / <i>Decision</i>	Action Required by:
R 100	<p><i>R 100, Making and Curing Concrete Test Specimens in the Field (TS 3b) – Champion Sean Parker – complete</i></p> <p><u>Status of previous proposal</u></p> <p>In 2018 and 2020, WAQTC proposed revisions to correct the tamping rod length in Table 1 and revise the Test Method (T) to a Practice (R).</p> <p>These revisions were published in the <i>2021 AASHTO Standards</i>. <i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 30	<p><i>T 30; Mechanical Analysis of Extracted Aggregate (TS 2c) – Champion John Bilderback – complete</i></p> <p><u>Status of previous proposals</u></p> <p>In 2020, WAQTC proposed revisions to Table A1. These revisions were published in the <i>2021 AASHTO Standards</i>. See 2022 QAC Proposed Revisions.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 85	<p><i>T 85, Specific Gravity of Coarse Aggregate (TS 1c) – Champion John Bilderback (formerly ITD and Board Chair) – complete</i></p> <p><u>Status of previous proposal</u></p> <p>In 2020, WAQTC proposed adding, ‘according to T 255,’ in Sections 8.1 and 8.5 and 122°F after 50°C in Sections 8.1 and 8.5. These revisions were published in the <i>2021 AASHTO Standards</i>.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 88	<p><i>T 88, Particle Size Analysis of Soils (TS 1a) – Champion Sean Parker – complete</i></p> <p><u>Status of previous proposal</u></p> <p>In 2020, WAQTC proposed moving Note 7 into 12.2, adding dispelling foam with 3 drops of isopropyl alcohol, and deleting Figure 5. These revisions were approved on COMP Ballot and should be published in the <i>2022 AASHTO Standards</i>.</p> <p><i>Desna will verify the revisions proposed in 2021 are published.</i></p>	DESNA BERGOLD

Topic	Discussion / <i>Decision</i>	Action Required by:
T 121	<p><i>T 121, Density (Unit Weight), Yield, and Air Content (Gravimetric of Concrete) (TS 3b) – Champion Sean Parker – complete</i></p> <p><u>Status of previous proposal</u></p> <p>In 2020, WAQTC proposed revisions to change ‘tap the sides’ to ‘tap around the perimeter’ in Section 7.4 Vibration and revise ‘sides’ to ‘side’ in Section 7.5. These revisions were considered editorial and were published in the <i>2021 AASHTO Standards</i>.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 152	<p><i>T 152, Air Content of Freshly Mixed Concrete by the Pressure Method (TS 3b) – Champion Sean Parker – complete</i></p> <p><u>Status of previous proposal</u></p> <p>In 2020, WAQTC proposed to change ‘tap the sides’ to ‘tap around the perimeter’ in Section 9.1.3 and revise ‘sides’ to ‘side’ in Sections 9.1.4, 9.3.1, 9.3.3, 9.4.2, A1.7.2, and A1.7.3. These revisions were considered editorial and were published in the <i>2021 AASHTO Standards</i>.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 166	<p><i>T 166, Bulk Specific Gravity (G_{mb}) of Compacted Asphalt Mixtures Using Saturated Surface-Dry Specimens (TS 2c) – Champion Larry Ilg – complete</i></p> <p>Status of previous proposals</p> <p>In 2020, WAQTC proposed changing the term ‘samples’ to ‘specimens’ where appropriate and changing the temperature in the water bath from ‘$25 \pm 1^{\circ}\text{C}$ ($77 \pm 1.8^{\circ}\text{F}$)’ to ‘$25 \pm 1^{\circ}\text{C}$ ($77 \pm 2^{\circ}\text{F}$)’ in Sections 6.2, 9.2, 9.3, and 10.1. These revisions were published in the <i>2021 AASHTO Standards</i>.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	

Topic	Discussion / <i>Decision</i>	Action Required by:
T 209	<p><i>T 209, Theoretical Maximum Specific Gravity (G_{mm}) and Density of Asphalt Mixtures (TS 2c) – Champion Larry Ilg – approved on concurrent ballot</i></p> <p><u>Status of previous proposals</u></p> <p>In 2020, WAQTC proposed revisions to address plant-produced samples, remove the requirement to dry the sample, and revise apparatus and the appendix. These revisions were approved on concurrent ballot and should be published in the <i>2022 AASHTO Standards</i>.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 272	<p><i>T 272; One-Point Method for Determining Maximum Dry Density and Optimum Moisture (TS 1b) – Champion Matt Linneman – complete</i></p> <p><u>Status of previous proposal</u></p> <p>In 2020, WAQTC proposed removing ‘or’ in 6.1.1. This revision was published in the <i>2021 AASHTO Standards</i>.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 283	<p><i>T 283, Resistance of Compacted Asphalt Mixtures to Moisture (TS 2d) – Champion Oak Metcalfe – complete</i></p> <p><u>Status of previous proposal</u></p> <p>In 2020, WAQTC proposed extensive revisions to this method. These revisions were published in the <i>2021 AASHTO Standards</i>.</p> <p><i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 308	<p><i>T 308, Determining the Asphalt Binder Content of Asphalt Mixtures by the Ignition Method (TS 2c) – Champion Oak Metcalfe – complete</i></p> <p><u>Status of previous proposals</u></p> <p>In 2020, WAQTC proposed adding a new Section 7.8, ‘Reset the internal balance to zero,’ revising ‘flat pan’ to ‘container’ in Section 9.1, and revising Sections 7.2 and 8.2 to say, ‘Use T 329 to oven dry the asphalt mixture specimen to a constant mass or</p>	

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Topic	Discussion / <i>Decision</i>	Action Required by:
	<p>determine the moisture content of a companion specimen.’ These revisions were published in the <i>2021 AASHTO Standards</i>. <i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 312	<p><i>T 312, Asphalt Mixture Specimens by Means of the Superpave Gyratory Compactor</i> – complete</p> <p><u>Status of previous proposals</u></p> <p>In 2020, WAQTC proposed changing T 168 references to R 97 and ‘binder’ and ‘HMA’ to ‘asphalt binder’ and ‘asphalt mixtures.’ These revisions were published in the <i>2021 AASHTO Standards</i>. <i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 329	<p><i>T 329, Moisture Content of Asphalt Mixtures by Oven Method (TS 2c)</i> – Champion John Bilderback – complete</p> <p><u>Status of previous proposals</u></p> <p>In 2020, WAQTC proposed replacing T 168 with R 97 in 2.1 and 5.1. These revisions were published in the <i>2021 AASHTO Standards</i>. <i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	
T 331	<p><i>T 331, Bulk Specific Gravity (G_{mb}) and Density of Compacted Asphalt Mixtures Using Automatic Vacuum Sealing Method (TS 2c)</i> – Champion Larry Ilg – complete</p> <p><u>Status of previous proposals</u></p> <p>In 2020, WAQTC proposed removing redundant information and revising Formula 1. These revisions were published in the <i>2021 AASHTO Standards</i>. <i>The published revisions are listed as a Completed Item on the 2022 Strategic Plan.</i></p>	

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Topic	Discussion / <i>Decision</i>	Action Required by:

REPORT ON 2021 PROPOSED AASHTO		
R 47	<p><i>R 47, Reducing Samples of Asphalt Mixtures to Testing Size (TS 2c) – Champion Larry Ilg – repropose revisions in 2022</i></p> <p><u>Status of previous proposals</u></p> <p>In 2021, WAQTC proposed revisions updating the figures and formatting, and use of ‘active voice.’ The revisions were submitted before the Mid-year webinar and will be discussed at the COMP Annual Meeting. See 2022 QAC Proposed Revisions.</p> <p><i>Additional revisions will be proposed in 2022.</i></p>	
R 76	<p><i>R 76, Reducing Samples of Aggregate to Testing Size (TS 1c) – Champion formerly John Bilderback</i></p> <p><u>Status of previous proposals</u></p> <p>In 2021, WAQTC proposed extensive revisions to R 76 to include ‘Reduction by Apex,’ and further revisions for clarity. The proposal was balloted in the Technical Subcommittee and received three negatives. See 2022 QAC Proposed Revisions.</p> <p><i>Additional revisions will be proposed in 2022.</i></p>	
T 176	<p><i>T 176, Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test (TS 1a) – Champion Sean Parker</i></p> <p><u>Status of previous proposal</u></p> <p>In 2019, WAQTC informed the TS 1a Chair that there were discrepancies in the description and figures of the apparatus.</p> <p>In 2021, WAQTC proposed removing the second sentence in 6.2 and revising the sample size in Section 6.4 to 1000 to 1500 g (2.2 to 3.3 lb.). These revisions were approved on COMP Ballot and should be published in the <i>2022 AASHTO Standards</i>.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD
T 310	<p><i>T 310, In-Place Density and Moisture Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) (TS 1b) – Champion Matt Linneman – approved on concurrent ballot</i></p> <p><u>Status of previous proposal</u></p> <p>In 2021, WAQTC proposed revisions to T 310 to change the term ‘probe’ to ‘source rod’ in Sections 9.5.2, 9.5.6, 9.5.8, and</p>	

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Topic	Discussion / <i>Decision</i>	Action Required by:

	Note 5. This was approved on concurrent ballot and should be published in the 2022 Standards <i>Desna will verify the revisions are published.</i>	DESNA BERGOLD
T 355	<p><i>T 355, In-place Density of Asphalt Mixtures by Nuclear Methods (TS 2c) – Champion Matt Linneman – approved on concurrent ballot</i></p> <p><u>Status of previous proposal</u></p> <p>In 2021, WAQTC proposed revisions to T 335 to change the term ‘probe’ to ‘source rod’ in 9.3.1.1 and 9.3.2.1. This was approved on concurrent ballot and should be published in the 2022 AASHTO Standards.</p> <p><u>Discussion item</u></p> <p>Mike Voth, CFLHD, asked if any member agencies are using non-nuclear density gauges.</p> <p>Many thought that AKDOT has been using the rolling density meters. Scott Nussbaum, UDOT and WAQTC Treasurer, indicated that Alaska developed specifications for density acceptance using rolling density meters, but they have not actually used them. Scott said that UDOT has been considering their use at some point. At this point, they indicate that the contractor can use any method they feel is appropriate for quality control, but not for acceptance.</p> <p><i>Desna will verify the revisions are published.</i></p>	DESNA BERGOLD

2022 PROPOSED AASHTO REVISIONS FROM THE QAC

	<p><i>R 76, Reducing Samples of Aggregate to Testing Size (TS 1c) – revisions to address TS Ballot (3/4)</i></p> <p><u>Revision proposal</u></p> <p>Based on the comments and negatives from the TS 1c Ballot, the QAC reviewed the previous proposal and revised the submittal. See the attachment to these minutes for specific negatives and comments with QAC recommended actions.</p> <p>The Board reviewed the QAC proposed revisions. Scott pointed out that ‘Quartering by Apex’ can be very confusing. The term ‘apex’ is used in the practice with two different definitions. The most common definition, ‘the uppermost point,’ is used when describing flattening the cone and the less common, ‘the</p>	
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Topic	Discussion / <i>Decision</i>	Action Required by:
	<p>narrowed or pointed end,' is used to describe slices of the quartering and the title of the option. The Board determined to revise the first use of the term to 'top.' They then decided that the term 'sector,' which is defined as 'a geometric figure bounded by two radii and the included arc of a circle,' should replace 'apex.' It is a better descriptor and the first definition when looking up the term.</p> <p>The Board also reviewed the sampling section and determined that the final two sentences should be struck.</p> <p>In the ballot comments, there were issues with how the 'Apex,' now 'Sectoring,' option was to be used. Desna drafted a new 'Note 4' which reads, 'The sectoring method may be used for reducing samples of fine aggregate to a target sample size with minimal manipulation.' The Board approved the revision.</p> <p>Other revisions by the Board include changing the final sentences in Sections 5.2 and 5.3 to active voice and revising the apparatus in Method C.</p> <p>Chad Clawson, ITD, Sean, Larry, and Desna reviewed the proposal after the Spring Meeting. Chad said that one of the comments he received while talking to the TS members who voted negatively was that Figure 6 only represents use of the quartering template. This gives the impression that one must use the template for 'Sectoring.' Larry recommended removing the template and just showing the material with the sectors removed. Desna had new graphics drawn that show the sector of material displaced. Desna distributed the final revisions to the Board for approval.</p> <p>Chad agreed to remain the Champion. Sean offered to assist Chad present the responses to the ballot comments with those that voted negatively. If those who voted negative agree that their comments have been appropriately resolved, Chad will ask Matt Beason, TS 1c Chair, to ballot the new proposal in the Technical Subcommittee before the next scheduled COMP ballot.</p> <p><i>Chad Clawson will resubmit the proposed revisions to Matt Beason, TS 1c Chair.</i></p> <p><i>Sean Parker will assist Chad.</i></p>	<p>CHAD CLAWSON SEAN PARKER</p>

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Topic	Discussion / <i>Decision</i>	Action Required by:
	<p><i>R 47, Reducing Samples of Asphalt Mixtures to Testing Size (TS 2c) – Champion Larry Ilg (TS 2c) – revisions in response to TS Ballot of R 76 (3/4)</i></p> <p><u>Revision proposal</u></p> <p>Based on the comments from the TS 1c ballot of R 76, the QAC reviewed the previously proposed revisions to R 47. They decided that the term ‘approximately’ should be added before ‘equal’ in Section 10.5.2.4.</p> <p>The QAC also decided that a new Section 10.5.2.5 should be added, ‘If necessary, repeat Sections 10.5.2.1 through 10.5.2.4 until the required sample size is obtained.’ This is a repeat of Section 10.5.1.3 with appropriate cross referencing.</p> <p>The Board reviewed and approved the QAC proposed revisions and based on the R 76 discussion, decided to propose the ‘Sectoring’ language.</p> <p><i>Larry Ilg will resubmit the proposed revisions to Allen Myers, TS 2c Chair.</i></p>	LARRY ILG
	<p><i>T 30; Mechanical Analysis of Extracted Aggregate (TS 2c) (3/4)</i></p> <p><u>Revision proposal</u></p> <p>Desna noticed that in Section A2.2 it states, ‘This mass is shown in Table A2.1 for five sieve-frame dimensions in common use.’ Table A2.1 was revised in 2021 and has only three sieve-frame dimensions. This revision is most likely editorial.</p> <p>Scott volunteered to discuss this revision with the TS Chair.</p> <p><i>Scott Nussbaum will submit the proposed revisions to Allen Myers, TS 2c Chair.</i></p>	SCOTT NUSSBAUM
	<p><i>T 112, Clay Lumps and Friable Particles (TS 1c) (3/4)</i></p> <p><u>Revision proposal</u></p> <p>During the QAC meeting, Nassim Sabahfar, FHWA, brought forward editorial revisions in Tables 1, 2, and 3.</p> <ul style="list-style-type: none"> – Table 1 second row, 3.75 mm should be 37.5 mm – Table 2, second and third rows 25 mm should be 37.5 mm 	

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Topic	Discussion / <i>Decision</i>	Action Required by:
	<ul style="list-style-type: none"> – Table 3 third row, 3.75 mm should be 37.5 mm, fourth row 1½ in. should be ½ in., fifth row insert mm after 4.75, sixth row 841 µm should be 850 µm. – All tables: extra spaces should be removed. <p>The Board agrees that these revisions should be editorial. Sean offered to work with the TS Chair to correct them.</p> <p><i>Sean Parker will submit the proposed revisions to Matt Beeson, TS 1c Chair.</i></p>	SEAN PARKER
OTHER AGENDA ITEMS		
RECIPROCITY QUESTIONNAIRE	<p>Desna told the Board that it has been three years since a reciprocity review has been conducted and according to the <i>TTQP Operational Agreement</i>, it is time to perform another. Desna then presented the revised Reciprocity Questionnaire. The suggested revisions include requesting a list of imposed time limits for the written exams. The WAQTC will be imposing time limits for the electronic written exam delivery and this information will help determine what those limits will be.</p> <p>Other suggested revisions to address options recently added to the <i>Administration Manual</i> include:</p> <p style="padding-left: 40px;">Adding a question on exam scoring, ‘When an initial exam score is above 70 percent but less than 60 percent in one or more test methods, is re-examination on the methods failed or the full exam?’</p> <p style="padding-left: 40px;">Adding additional language in red:</p> <ul style="list-style-type: none"> – Revising the question on Performance Exams to include language in red, ‘Are all performance exams in the ‘direct presence’ of the examiner or combination of performance samples and Examiner direct oversight?’ – ‘Are exams stored under lock and key or otherwise secure?’ <p>The Board decided that the question on exam storage should also request information on how the exams are secured.</p> <p>The Board approved the revisions to the Reciprocity Questionnaire.</p>	

Topic	Discussion / <i>Decision</i>	Action Required by:
	<p>Desna asked when the Board would like the Reciprocity Questionnaire distributed. In 2019, the reciprocity review was conducted in October and the summary and report were complete and distributed in December. Scott suggested that since we would like the information on the written exam time limits when implementing electronic written exams, it would be better to perform the review sooner. The Board agreed.</p> <p><i>Desna Bergold will distribute the revised Reciprocity Questionnaire in April.</i></p>	DESNA BERGOLD
PROCESS FOR REVISION PROPOSALS TO AASHTO STANDARDS	<p>The QAC made suggestions for improving and updating the <i>Process for Revision Proposals to AASHTO Standards</i> document: change Technical Section to Technical Subcommittee (TS), include templates of the proposal letter sent to the TS Chair and the PowerPoint the Champion can present during COMP meetings.</p> <p>The Board reviewed the proposed revisions and decided to strike the offer of a PowerPoint presentation from the letter template. This offer only will be made when a TS Chair requests a WAQTC member present the proposed revisions.</p> <p><i>Desna will include the revised 'Process for Revision Proposals to AASHTO Standards' in the Operations Manual.</i></p>	DESNA BERGOLD
REQUEST USE OF FIGURE 2 OF AASHTO T 152	<p><i>T 152, Air Content of Freshly Mixed Concrete by the Pressure Method Figure 2</i></p> <p>During the QAC Winter meeting, the committee reviewed the pictures for the FOP for AASHTO T 152 and determined that the FOP should include an illustration labeling the parts of a Type B air meter. The QAC then reviewed AASHTO T 152, and it has a great diagram of the Type B Meter. The QAC would like the Board to ask AASHTO for permission to use it, which would be better than trying to recreate it.</p> <p>Sean reminded everyone that WAQTC has a letter from AASHTO granting permission to use AASHTO Standards for the FOPs Self-Consolidating Concrete training and approval of the way WAQTC has been using the Standards thus far. The QAC was not certain it would extend to the figures. It would be best to ask up front.</p> <p>Oak suggested talking to Casey Soneira, AASHTO, to determine the best way to get permission. He volunteered to</p>	

Topic	Discussion / <i>Decision</i>	Action Required by:
	<p>call Casey and asked that Desna provide him with the earlier letter for reference.</p> <p><i>Desna Bergold will forward the AASHTO Permissions Letter.</i></p> <p><i>Oak Metcalfe will call Casey Soneira for permissions to use Figure 2 from AASHTO T 152.</i></p>	<p>DESNA BERGOLD</p> <p>OAK METCALFE</p>
<p>ADMINISTRATION MANUAL AND RPIH</p>	<p><i>Administration Manual and Rights, Policies, and Information Handbook (RPIH)</i></p> <p>The QAC proposed removing the term ‘Note’ in the <i>Administration Manual</i> and <i>RPIH</i> under ‘Certified Technician Registry,’ as the following paragraph appears to be mandatory. In AASHTO Standards and WAQTC FOPs, notes are considered non-mandatory.</p> <p>Note: The number assigned with the first Certification will remain with that employee no matter if additional Certifications may be attained through other WAQTC Agencies. Should a technician obtain a Certification in a state other than the one designated by the assigned Certification number, the Agency issuing the additional Certification will notify the Agency where the Certification number originated so that the Certification may be properly registered.</p> <p>The Board approved the revision.</p> <p><i>The term ‘Note’ will be removed in the ‘Certified Technician Registry’ section.</i></p>	<p>DESNA BERGOLD</p>
<p>FUNDING AND BUDGET</p>	<p>Scott presented a chart (attached) depicting WAQTC’s funding since the second quarter of 2019. It shows the amount of Federal funds and other funds, primarily State funds.</p> <p>He pointed out that due to the lack of travel since early 2020 there is more money than in previous years. Before 2020, WAQTC was spending about \$100,000 in travel and consultant services per year</p> <p>The Federal funds, which cannot be transferred, are expended in TPF-5(349), the remaining funds will be moved into the new pooled fund, TPF-5(476) and a new contract with D B Consulting will be established.</p> <p><i>Scott Nussbaum will begin processing a new contract with D B Consulting and Associates, LLC.</i></p>	<p>SCOTT NUSSBAUM</p>

Topic	Discussion / <i>Decision</i>	Action Required by:
WRITTEN EXAM DELIVERY PROGRESS	<p>WAQTC is expecting to contract with Kryterion to deliver electronic written exams. One of the first steps will be to include administration of the contract and payment to Kryterion for implementation in the consultant contract with D B Consulting. This will be in conjunction with the new pooled fund contract.</p> <p><i>Scott Nussbaum will begin processing a new contract with D B Consulting and Associates, LLC.</i></p>	SCOTT NUSSBAUM
BROCHURE AND BENEFITS OF BECOMING A MEMBER	<p>Desna presented minor revisions to the <i>WAQTC Brochure</i>. They include updating Sean Parker's contact information, revising 'member states' to 'member agencies,' and removing a superfluous 'the.' She also updated the TPF project number on the <i>Benefits of Becoming a WAQTC Member</i> document. The Board approved the revisions. Desna will distribute the Brochure and Benefits to anyone interested during the upcoming WASHTO meeting.</p> <p><i>Revisions to the WAQTC Brochure and Benefits of Becoming a WAQTC Member are approved.</i></p> <p><i>Desna Bergold will distribute the documents during the WASHTO meeting.</i></p>	DESNA BERGOLD
2022 STRATEGIC PLAN LONG TERM GOALS		
ONLINE TRAINING – WAQTC YOUTUBE CHANNEL	<p><i>WAQTC YouTube Channel</i></p> <p>Misty Miner, MDT and QAC Vice Chair, was invited to join the meeting to discuss the virtual training she has been conducting. To support the virtual training, she created a lot of video content. She said that they have used an expensive video camera and a GoPro, she said the videos from the GoPro are as good as with the fancy camera,</p> <p>Chris Russell, CDOT and QAC Member, has also developed videos that CDOT has posted to YouTube on a CDOT Employee channel.</p> <p>The QAC proposes developing a WAQTC YouTube channel with the video content that has already been developed. The WAQTC website and PowerPoint Presentations could include links to the YouTube videos. Many members are already considering creating more videos for their own training which could also be included.</p>	

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Topic	Discussion / <i>Decision</i>	Action Required by:
	<p>The QAC wanted the Board to know that when the term ‘WAQTC’ is searched on YouTube there are some unauthorized videos. Oak said that this confirms the need to make ‘authorized’ content.</p> <p>The Board members agreed that a WAQTC YouTube Channel would be beneficial to all the members. Larry suggested the QAC develop a timeline for developing video content. Desna will include it on the QAC Summer Meeting agenda.</p> <p>Misty explained that a private YouTube channel could be set up so that it can only be accessed with the URL. Scott asked Desna if she would create a private YouTube Channel now for review and vetting. Desna agreed that she would.</p> <p>Oak said how much MDT appreciated Misty’s efforts. The videos will be supplemental to what WAQTC is already offering and has vast potential.</p> <p>The Board decided that the Strategic Plan should be revised so that online training be moved from a Long-Term Goal to a Short-Term Goal and included as a 2022 Planned Work Item.</p> <p><i>Desna Bergold will create a private WAQTC YouTube Channel and work with Misty Miner and the QAC to upload video content for review.</i></p> <p><i>The Strategic Plan will be revised, online training will be moved to a Short-term goal and listed as a 2022 Planned Work item.</i></p>	DESNA BERGOLD
RANDOMLY GENERATE QUESTIONS	<p><i>Develop Electronic Question Database – Randomly Generate Questions</i></p> <p>A written exam question database for randomly generating exam questions to produce a unique exam is a Long-Term goal on the Strategic Plan. While reviewing <i>ASTM D3740, Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction</i>, Desna identified potential issues with randomly generating exam questions, an exam could potentially skip important sections of the FOP, such as two or three questions on sampling and none on the procedure, or mostly calculations without anything on reporting. Desna also pointed out that the QAC intentionally follows the steps of the FOP when developing the exams to reinforce the order in which a practice of test method is performed.</p>	

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Topic	Discussion / <i>Decision</i>	Action Required by:
	<p>The Board agreed that an unbalanced exam is not ideal. They said that with enough questions per subject, questions could be randomly ‘selected’ to cover the FOP in order. They approved revising the <i>Strategic Plan</i> to say, ‘Develop Electronic Question Database – Randomly Generate Select Questions</p> <p>‘Develop enough exam questions that a database can create a randomly selected unique exam representing the identified aspects in order of the practice or test method for each participant.’</p> <p><i>Desna Bergold will revise the Strategic Plan with he approved statement.</i></p>	DESNA BERGOLD
STRATEGIC PLAN – 2022 PLANNED WORK		
PLANNED WORK	<p>The Board reviewed the 2021 Planned work and revised the 2022 Planned Work.</p> <p>Priorities of the Executive Board:</p> <p><u>Continue work on ‘on-going’ activities.</u></p> <p>Through the Summer and Winter Meetings, the QAC has worked on ‘on-going’ activities.</p> <p><u>Evaluate existing training materials for needed improvements / updates.</u></p> <p>The QAC accomplishes this work through the Summer Meeting and subsequent Training Materials updates.</p> <p><u>Member teleconferences to share developments in training and certification platforms.</u></p> <p>Member teleconferences are held when there is a need.</p> <p><u>Explore Implement virtual written examinations.</u></p> <p>Currently progressing.</p> <p><u>Develop online training and videos.</u></p> <p>See discussion above.</p> <p><u>Thorough review of written examination methodology</u></p> <p>Listed as a Completed Item on the <i>2022 Strategic Plan</i> and removed from 2022 Planned work.</p>	

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Topic	Discussion / <i>Decision</i>	Action Required by:
	<p><u>Develop written examination to comply with ASTM D3740.</u></p> <p>Listed as a Completed Item on the <i>2022 Strategic Plan</i> and removed from 2022 Planned work.</p> <p><i>Discussion items, no further action is required.</i></p>	
OTHER ITEMS		
ADMINISTRATION MANUAL AND THE NEW SCORING CRITERIA	<p>Oak said that MDT has had a situation with the new scoring. A technician took the written exam and had over 70 percent overall but less than 60 percent on one module. The exam administrators had the technician take the entire written exam again. The technician then scored 70 percent overall but less than 60 percent on a different module, so they hadn't failed any single module more than once. This seems to require different criteria than before where a technician had to fail the same module twice or the entire exam twice.</p> <p>Scott indicated that UDOT had a similar situation. After much discussion, UDOT decided that if a technician fails a module after passing it once, it is still a failure as it indicates a marginal understanding of the material. UDOT has also discovered that technician's study harder with the new exam scoring.</p> <p>Oak thinks that the <i>Administration Manual</i> could be a bit clearer on the intent. He may draft new language and propose it in the upcoming August meeting.</p> <p><i>Scoring and possible new language in the Administration Manual will be on the agenda for the upcoming Executive Board Summer Meeting.</i></p>	OAK METCALFE
SPECIMEN TRANSPORTING QUALIFICATION.	<p>Chad said the ITD has had discussion concerning technicians who are not qualified to transport specimens, especially concrete cylinders. Scott indicated that UDOT has a Sampling and Density Testing Technician Qualification, based on the WAQTC FOPs that are related to sampling and performing density testing. All technicians who perform these functions must be qualified. Not necessarily just to transport specimens but it usually works out that way.</p> <p><i>Discussion item, no further action necessary.</i></p>	

R 76 NEGATIVE VOTES FROM BALLOT:

General correction:

To address comments on the use of the new 10.1.3, Apex Method, the QAC recommends revisions to Section 5, Selection of Method.

- 5.2. *Coarse Aggregates*—Reduce the sample using a mechanical splitter in accordance with Method A (preferred method) or by quartering in accordance with Method B Sections 10.1.1 or 10.1.2. Method B Section 10.1.3 and the miniature stockpile Method C are not permitted for coarse aggregates. ~~or mixtures of coarse and fine aggregates.~~
- 5.3. *Combined Coarse and Fine Aggregate*—Samples that are in a dry condition may be reduced in size by either Method A or Method B Sections 10.1.1 or 10.1.2. Samples having free moisture on the particle surfaces may be reduced in size by quartering according to Method B Sections 10.1.1 or 10.1.2. When Method A is desired and the sample is damp or shows free water, dry the sample until it appears dry or until clumps can be easily broken by hand (Note 2). Dry the entire sample to this condition, using temperatures that do not exceed those specified for any of the tests contemplated, and then reduce the sample. Method B Section 10.1.3 and the miniature stockpile Method C are not permitted for combined aggregates.
- 5.1 *Fine Aggregates* – Already states, ‘Samples having free moisture on the particle surfaces may be reduced in size by quartering according to Method...’

Kansas

Comments from ballot	QAC response
6.1. Since we are going to active tense, change "When additional tests are to be conducted" to "When conducting additional tests" Also, keep the "for" in the last sentence.	Revised
10.1. Remove "either" and the first "or"	Revised
10.1.1.2. Keep it at three times, it's adequate. The minimum of four times is only for rolling the aggregate on a tarp	The QAC is willing to remove this recommendation.
10.1.1.3. Keep "so that each quarter sector of the resulting pile will contain the material originally in it."	The QAC will leave this statement in the WAQTC proposal. Revised, ‘Carefully flatten the conical pile to a uniform thickness with a diameter

	approximately four to eight times the thickness...’
10.1.2.1. change to read "place the field sample on a tarp and mix with ..."	Revised
10.1.2.3. applies only to the rolling method in 10.1.2.2. and thus, should be numbered as 10.1.2.2.1.	Revised
Renumber the rest of the section accordingly.	Revised
The "Remove and set aside" paragraph should have its own paragraph number.	Section 10.1.2.6 now says, ‘Remove two diagonally opposite quarters...’ Section 10.1.2.7 says, ‘if necessary, repeat...’
The new verbiage now requires the "back-half" to be set aside where it was optional before.	Took out ‘and set aside’ added back, ‘The unused quarters may be set aside for later use and testing.’
10.1.3. You are eyeballing the amount of material being removed from the quarter section. You say to remove an equal portion, but that will never be equal. You have biased the sample. Do not recommend adding this procedure to R 76.	Add ‘approximately’ in Sections 10.1.3.7, 10.1.2.5, 10.1.2.5.2, and 10.1.3.4.
12.1. Keep it at three times as this is adequate.	Leave at three.

Mississippi

Comments from ballot	QAC
Why is a distinction being made between 9.1 and 9.2, being redundant with trowels in 9.1 and 9.2 and straightedges in 9.2?	Removed trowel from Section 9.1. Section 9.2, ‘Metal straightedges:’ as a descriptor.

<p>Are we comfortable with scoops, trowels, and drywall taping knives made of plastic? If not, perhaps 9.1 should say something like: "Metal straightedge: scoop, shovel, trowel, spatula, drywall taping knife, or other appropriately similar hand tool."</p>	<p>Put metal as a descriptor for straightedges.</p>
<p>In 9.4, currently the tarp is implied to be rectangular. Now any shape tarp is allowable. Is a change in tarp shape acceptable? If the tarp is not implied as being required to be rectangular, now it is allowed to be circular, and has no corners to pull in 10.1.2.2 and 10.1.2.3.</p>	<p>Added rectangular.</p>
<p>Just changing one method so that it is like another method doesn't seem sufficient reason for making the change from "at least 3" to "at least 4" in 10.1.1.3. Why is making one method like another method sufficient for making the change? Since the tarp was implied to be rectangular, this made the "at least 4" roll requirement sensible, one roll for each corner per 10.1.2.2. Adding a sample flipping to mimic the tarp seems ungrounded.</p>	<p>Three reinstated</p>
<p>Perhaps 10.1.1.6 should say, "Repeat Sections 10.1.1.2 through 10.1.1.5 as often as necessary to obtain the required test sample size." or "If necessary to obtain the required test sample size, repeat Sections 10.1.1.2 through 10.1.1.5 as often as required."</p>	<p>Proposing: ‘10.1.1.6. If necessary, repeat Sections 10.1.1.2 through 10.1.1.5 until the required sample size is obtained (see Figure 4).’</p>
<p>Perhaps 10.1.2.3 should say "...rolled at least four times and until it is thoroughly mixed..."</p>	<p>Added, ‘Roll the material at least four times until it is thoroughly mixed.’ in Section 10.1.2.2 ‘Pull each corner of the tarp...’ is now Section 10.1.2.3</p>
<p>Also, the previous figure showed the corners being simultaneously pulled up, towards the center of the tarp, and towards each corner's diagonally opposite corner. The proposed figure shows two corners being pulled up and towards their two other adjacent corners. This will not form the required cone.</p>	<p>The QAC recommends that the figure be revised.</p>
<p>10.1.2.8 - change "required sample size" to "required test sample size"</p>	<p>Revised here and in Section 10.1.1.6</p>

<p>If 10.1.3 is going to be added, why not also allow a template which divides the sample in quarters and eighths?</p>	<p>Added template to Section 10.1.1.3</p> <p>Need more information to fully address this.</p>
<p>12.1 - if all the paragraphs in 10 are broken out into individual Sections, why was this not?</p>	<p>Recommended breaking the paragraph into steps.</p>
<p>Ditto on adding an additional pile flipping from 3 to 4 being ungrounded</p>	<p>Leave at 3.</p>

Florida

<p>Two apparent problems in steps 5, 6, and 7 of 10.1.3</p> <ol style="list-style-type: none"> 1. Difficulty in getting a clean separation 2. Difficulty in duplicating the cut proportion in the opposite quarter 	<p>Section 10.1.3 is intended for Fine aggregate which can only be quartered at SSD or wetter. See ‘General Correction.’</p> <p>All 'equals' are approximate.</p>
<p>In 10.1.1.2, no data have been provided to justify the change from mixing the sample three times to four times. Until a proven need is provided, it is also an added burden to the health and safety of the technicians</p>	<p>Leave at 3.</p>
<p>The perceived purpose of the Reduction by Apex method in 10.1.3 is to create a short-cut to attain the final, smaller portion of sample for a test. If the technician followed the procedure and performed a subsequent split of two opposing corners with the quartering device, then this could be done in a reasonably equivalent amount of time. The rationale for introducing this new method is that asphalt technicians do this. However, asphalt and granular non-cohesive aggregate do not behave the same.</p>	<p>The intent is to be able to obtain a representative specific sample size, such as required in T 84, which has a tolerance for sample size, with minimum manipulation. See ‘General Correction.’</p>
<p>10.1.1.3 Correct to "Carefully flatten the conical pile to a uniform thickness and diameter of approximately four to eight times the thickness."</p>	<p>Revised, ‘Carefully flatten the conical pile to a uniform thickness with a</p>

	diameter approximately four to eight times the thickness...'
The new figures are great but the angle of repose of the conical stockpiles is misleadingly steep and should be reduced to represent a true sample.	The QAC feels that as a representation of a cone the Figures are adequate.

Other comments with Affirmative votes:

<p>Arizona:</p> <p>Revisions look good. As long as the references to the figures are accurate.</p> <p>Section 10.1.3.8 Continue using the apex method with the unused portion of the material until samples have been obtained for all required tests (see Figure 6).</p> <p>Comments: The figure below section 10.1.3.8 is accurate and shows the apex method. However, if you go to Figure 6 -Reduction by Apex Method, it shows something different, then the Apex Method. The reference to "Figure 6" needs to be accurate. There are conflicting images.</p>	The conflicting images are redlined struck-out images.
<p>Georgia:</p> <p>Straightedges: metal spatulas, trowels, metal straightedges, or drywall taping knives. "Metal straightedges" should be removed/deleted from Section 9.2, since metal straightedge is a tool used for drawing straight lines, or checking their straightness, NOT a flatten spatulas or towel.</p>	Addressed with Mississippi's comments.
<p>South Carolina:</p> <p>4.2, In the last sentence, it looks like the word "sample" should be added at the end of the sentence.</p> <p>6.1: I think the last sentence should read "Use similar procedures for aggregate produced in the laboratory."</p>	Revised Revised
<p>Tennessee:</p> <p>Vote affirmative, as a suggestion, in section 10.1.2.3 maybe add language that states, "as close to a conical pile as possible."</p>	QAC did not recommend any action on this.

Pooled Fund Balance

