AASHTO
THE VOICE OF TRANSPORTATION
SUBCOMMITTEE ON MATERIALS

SUBCOMMITTEE ON MATERIALS

2017 Mid-Year Meeting
Wednesday January 18, 2017
2:00 – 4:00 PM EST

TECHNICAL SECTION 4b
Flexible and Metallic Pipe

I. Call to Order and Opening Remarks

II. Roll Call

Voting Members

Name	State	Present
Bailey, William R.	Virginia	X
Peoples, Christopher A.	North Carolina	
San Angelo, Michael	Alaska	
Stolarski, Phil J	California	
Pinkerton, Jennifer M.	Delaware	
Knight, Chase	Florida	X
Douds, Richard	Georgia	X
Jim Trepanier	Illinois	X
Bradbury, Richard L	Maine	
Fung, Clement W.	Massachusetts	
Kline, Therese R.	Michigan	X
Trautman, Brett	Missouri	X
Streeter, Donald A.	New York	X
Ron Horner	North Dakota	X
Becca Lane	Ontario	
Ramirez, Timothy	Pennsylvania	X
Temple Short	South Carolina	X
Brian Egan	Tennessee	X
Williams, Kurt	Washington	
Kemp, Peter	Wisconsin	X

OH, AR, VT,

Friends and Non-Voting Members

Name	Affiliation	Present
Rothblatt, Evan	AASHTO - Liaison	X
Malusky, Katheryn	AASHTO - Liaison	X
Lenker, Steven E.	AMRL	
Uherek, Greg	AMRL	
Knake, Maria	AMRL	
McGough, Michael	NCSPA	X
Chestnut, Brian W	Lane	X
Currence, Daniel	PPI	X

Christensen, Heather	Prinsco, Inc.	X
Beakley, Josiah W	ACPA	X
Pluimer, Michael	Crossroads Eng.	X
Robert Sarcinella	AASHTO - NTPEP	X
Oliver Delery	Forterra	X
Jim Goddard	JG3 LLC	X

III. Approval of Technical Section Minutes

Minutes of the August 2, 2016 TS 4b meeting in Greenville, South Carolina

- Motion by MI to approve minutes as distributed second by MO the meeting minutes were accepted

IV. Old Business

A. SOM Ballot Items

Item 1: Revise M167M/M167-14 Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches.

The revision to M167M/M167-14 passed SOM ballot with 41 affirmative votes, 0 negatives and 10 no votes.

- Five comments/editorial corrections were reviewed and the suggestion of the Chair is to accept these changes. **(See Comment Sheet on TS 4b SOM Rolling Ballot 2 page 5 and 6 of these minutes).** It was agreed that the changes were editorial and could be accepted. Bill will speak with publications to have the changes implemented.

Item 2: Revise M294 Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter.

The revision to M294 passed SOM ballot with 41 affirmative votes, 0 negatives and 10 no votes.

There were two comments:
PA
In Section 7.8.8 and at the end of last sentence, the text "sealed with compatible PE material" is used. Is the intent that the seal material is PE material? If not, suggest rewording this to read "sealed with material compatible

M294 Specification

7.8.8. Only fittings supplied or recommended by the pipe manufacturer shall be used. Fabricated fittings shall be manufactured from pipe meeting the requirements of this specification and all seams must be completely sealed with compatible PE material.

7.8.9. Fabricated fittings shall be supplied with joints compatible with the overall system

Discussion: Then intent is to seal the pipe with a PE material but does not need to meet this specification it just has to be leak resistant and water tight. The welding material may not meet cell class but should be PE material. Tim mentioned he reads it as being any material that is compatible with PE material, but is hearing that it should be PE material but it does not need to meet the cell class. The current wording could allow for other material if it is compatible

Resolution: Action Item: Tim will send new wording to Bill. Bill will share that wording with publications, Dan Currence, and the M294 task force. As long as it is determined that the word does not change technically it may be added.
Resolution: PA sent new wording to Chair and Task Force members. Task Force members felt original wording sufficient, therefore "Sealed with compatible PE material" will stay as written on SOM Rolling Ballot 2 for Section 7.8.8 of M294 Specification.

The other comment from SC was on capitalization and the Publication staff will be consulted. **(See Comment Sheet on TS 4b SOM Rolling Ballot 2 page 5 and 6 of these minutes.)**

Item 3: Adopt PP 63-09 Provisional Standard Practice for Pipe Joint Selection for Highway Culvert and Storm Drains as a full standard practice.

The vote to adopt PP 63 as full standard passed SOM ballot with 41 affirmative votes, 0 negatives and 10 no votes.

There were two comments from MI. **(See Comment Sheet on TS 4b SOM Rolling Ballot 2 page 5 and 6 of Agenda)**

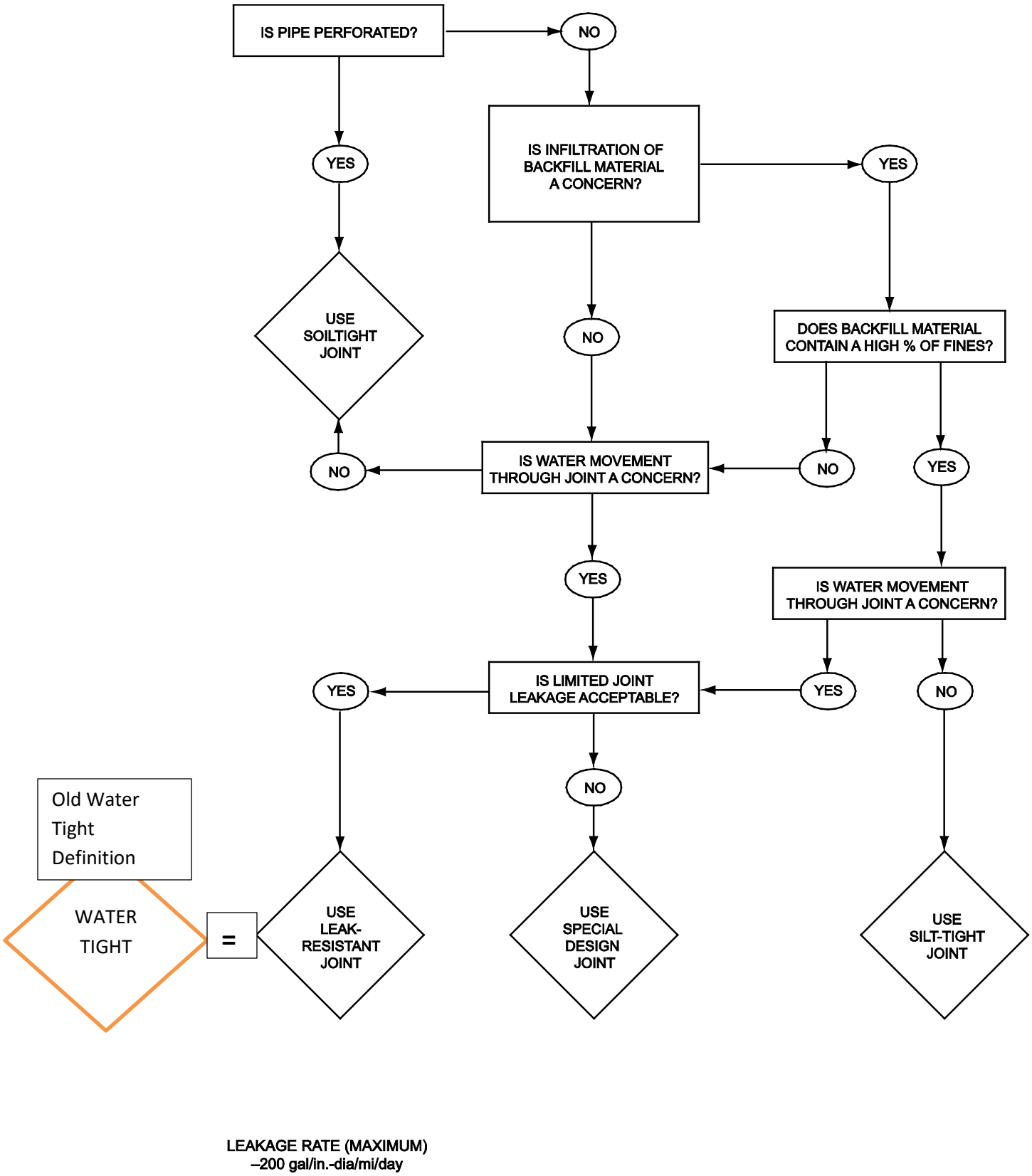
MI

Would still prefer to see Figure 1 page 70 of 84 read
"IS LIMITED JOINT LEAKAGE ACCEPTABLE?"
--> NO
--> USE WATERTIGHT JOINT
AND perhaps another layer that asks if pull apart, shear, or bending strength is needed then to select a SPECIAL DESIGN JOINT

Figure 1 of PP 63 was show on screen page 4 of these meeting minutes.

Discussion: Bill explained the old definition of water tight used in sanitary sewer specifications and in some older AASHTO construction specification has been zero (0) leakage in a plant test with an allowance for some leakage after construction in a field test. This allowance is 200 gallons/in-diameter/mile/day. This is the same definition PP 63 is using but calling the joint leak resistant because there is a leakage rate allowed in the constructed joint. Bill used the diagram on page 4 to demonstrate and describe this to the technical section. Leak Resistant = Old Water tight definition.

Resolution: Bill had called Michigan and discussed with them the definition of water tight and leak resistant in PP 63. PP 63 will be moved forward and published as a full standard.



LEAKAGE RATE (MAXIMUM)
–200 gal/in.-dia/mi/day

Comment Sheet on TS 4b SOM Rolling Ballot 2

Item No.	Description			
1	**Revise M167M/M167-14 Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches.**			
State	**Vote**	**Comment**	**Chair Review**	**Suggested Resolution**
MO	Affirmative Comment	1) In Section 6.5, the first line, capitalize the letter 'S' in the word 'Section'.	Will review Section 6.5 with Publication staff and make correction	The word section has been removed. The number 6.5.1 is all that is written in the first line of section 6.5.
PA	Comment	1) In Table 7, revise from "Circumferential Seams (Figs. 2,3:" to "Circumferential Seams (Figs. 2 and 3):".	Will review with Publication staff and make correction	Accept Change
MI	Comment	Table 3 page 54 of 84 and Table 7 page 58 of 84 - Font boldness does not match table 1, 2, 4 Example: Table 3 - Mechanical....	Good catch will make change	Accept Change
MI	Comment	There are 2 Table 7 page 58 and page 6; page 61 should be Table 8.	Good catch will review table numbering and will correct all that need it.	Accept Change
MI	Comment	Correctly number the next tables 8 through 12	Good catch will review table numbering and will correct all that need it.	Accept Change
Item No.	**Description**			
2	**Revise M294 Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter..**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**

PA	Affirmative Comment	1) In Section 7.8.8 and at the end of last sentence, the text "sealed with compatible PE material" is used. Is the intent that the seal material is PE material? If not, suggest rewording this to read "sealed with material compatible with PE"	The intent is seal fabricated fitting with a PE material. However the PE material does not have to meet cell class for this specification.	PA sent new wording to Chair and Task Force members. Task force members felt original wording sufficient. Sealed with compatible PE material will stay as written.
SC	Comment	Section 3.5 - Buckling Deflection limit - capitalization of the "B" and "D"	Buckling Deflection is capitalized but everything else in section is not.	Consult with Publication Staff
Item No.	**Description**			
3	**Adopt PP 63-09 Provisional Standard Practice for Pipe Joint Selection for Highway Culvert and Storm Drains as a full standard practice..**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
MI	Affirmative BUT	Would prefer 3.1.15 to be moved to 3.1.17 and water tight joints moved above.	The definitions in Section 3 are in alphabetical order	Will remain the same
MI		Would still prefer to see Figure 1 page 70 of 84 read "IS LIMITED JOINT LEAKAGE ACCEPTABLE?" --> NO --> USE WATERTIGHT JOINT AND perhaps another layer that asks if pull apart, shear, or bending strength is needed then to select a SPECIAL DESIGN JOINT	Will ask MI to explain reasoning. Considering a leak resistant joint is watertight when tested at the plant but allows a leakage rate for field testing.	**Discussed At Mid-Year Meeting and PP 63 will be published as balloted.** Old Water tight = Leak Resistant joint.

B. TS Ballots

- There were no TS ballots

C. Reconfirmation ballots

There was a Technical Section 4b Reconfirmation Ballot for the following eight (8) specifications, one (1) practice, one (1) test method, and one (1) provisional spec:

- **M 190-04 (2012)**: Specification for Bituminous-Coated Corrugated Metal Culvert Pipe and Pipe-Arches
- **M 219-92 (2012):** Specification for Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches
- **M 243-96 (2012):** Specification for Field-Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches
- **M 252-09 (2012):** Specification for Corrugated Polyethylene Drainage Pipe
- **M 274-87 (2012):** Specification for Steel Sheet, Aluminum-Coated (Type 2), for Corrugated Steel Pipe
- **M 289-91 (2012):** Specification for Aluminum-Zinc Alloy Coated Sheet Steel for Corrugated Steel Pipe
- **M 326-08 (2012):** Specification for Polyethylene (PE) Liner Pipe, 300- to 1600-mm Diameter, Based on Controlled Outside Diameter
- **M 330-13:** Specification for Polypropylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter
- **R 63-13:** Standard Practice for Solid Wall High-Density Polyethylene (HDPE) Conduit for Non-Pressure Applications Used for the Protection of Power and Telecommunications Cables
- **T 241-95 (2012):** Standard Method of Test for Helical Continuously Welded Seam Corrugated Steel Pipe
- **MP 20-13 (2014):** Specification for Steel-Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 1500-mm (12- to 60-in.) Diameter

Results: All specifications, the practice, the test method and the provisional specification passed reconfirmation with 15 affirmative votes, 0 negatives and 4 no vote.

M 190

There were 7 comments on M 190 some were more than editorial. The editorial comments will be evaluated and if accepted will be changed by publication staff. The comments that are more than editorial will be referred to the stewards of this specification and evaluated for possible TS ballots in the spring.

Resolution: **TF 2017-1** will look at this specification for incorporating a method of measuring thickness of coating. Task Force Members are PA, VA and NCSPA.

M 219

There was one comment on M 219 that is editorial. This comment will be accepted and published.

M243

There were 3 comments on M 243 one comment was more than editorial. This comment on developing a measuring method for the asphalt coating was referred to a task force (TF 2017-1) for evaluation and possible TS ballots in the spring. The one comment on thickness should be 1.3 mm was accepted.

Does this need to be reconfirmed again because not all pages shown on ballot?

- Action Item: Evan will check with tech section to see if everyone had this issue. If not we can send a copy to PA and have them look it over. Arkansas stated that they were only able to see two pages as well. There was a discussion that the standard may only be two pages.
- Resolution: **Standard is only two pages long. Standard does not need to be reconfirmed again.**
- **Resolution**: **TF 2017-1** will look at this specification for incorporating a method of measuring thickness of coating. Task Force Members are PA, VA and NCSPA.

M 252

There were 5 comments on M 252 that seemed more than editorial. The comments that are more than editorial will be referred to Task Force TF 2017-2 for evaluation and possible TS ballot in the spring. M252 will be published without any changes.

M 274

There were no comments. M 274 will be republished without any changes.

M 289

There were no comments. M 289 will be republished without any changes.

M 326

There was one editorial comment and 3 comments that were more than editorial. The editorial comment will be evaluated and if accepted will be changed by publication staff. The comments that are more than editorial will be referred to Task Force TF 2017-3 for evaluation and possible TS ballot in the spring. M326 will be published with one possible editorial change.

M 330

There were 10 comments on M 330 that were considered more than editorial. The comments that are more than editorial will be referred to Task Force TF 2017-2 for evaluation and possible TS ballot in the spring. M330 will be published without any changes.

R 63

There were 2 editorial comments. The editorial comments will be evaluated and if accepted will be changed by publication staff.

T 241

There were no comments. T 241 will be republished without any changes.

MP 20

There were 2 comments on MP 20. Both appear to be more than editorial. MP 20 is on one year extension so the comments will be referred to Task Force TF 2017-4 for evaluation and possible TS ballot in the spring. MP 20 will be published without any changes.

See the following Comment Sheet on TS 4b Reconfirmation Ballot (pages 9 through 16 of these minutes) for details.

Comment Sheet on TS 4b Reconfirmation Ballot 2

Item No.	Description			
1	**Reconfirm M 190-04 (2012)**			
State	**Vote**	**Comment**	**Chair Review**	**Suggested Resolution**
PA	Affirmative Comment	1) Consider revising title from "Bituminous-Coated" to "Asphalt-Coated".	Will review suggestion with Publication staff and make revision if considered editorial.	Accept Change with concurrence from Publication staff.
PA	Comment	2) In Sections 1, 2, 3, and 4, consider revising from "bituminous" to "asphalt" in all locations to be consistent with the use of "asphalt" in Sections 5, 6, 7, and 9.	Will review suggestion with Publication staff and make revision if considered editorial.	Accept Change with concurrence from Publication staff.
PA	Comment	3) In Section 3.2.1., the text references "Type 1A" pipe, but "Type 1A" pipe is not defined in Section 3.1. Consider adding "Type 1A" pipe with definition to Section 3.1. 3) In Section 3.2.3, consider revising from "a smooth pavement" to "one or more smooth pavements" to match text of Section 3.2.2.	Is this a technical change?	**Mike McGough indicated Type 1A is defined in M36 standard. Task Force TF 2017-1 formed to look at this comment and others. Will not publish these suggestions.**

PA	Comment	4) In Section 7, consider adding a subsection for determining coating thickness. Section 7.1 references meeting the requirements of Section 4.1 where the minimum coating thickness requirements are specified. Within the new coating thickness subsection, consider referencing ASTM D1005 since it is listed in Section 2.2.	Is this a technical change?	**Task Force TF 2017-1 to consider these comments.**
PA	Comment	5) In Section 7.1, last line, consider revising from "after dipping" to "after coating" to be consistent with text of Section 6.1 where "Coating application" and "inserting" is used rather than "dipping".	Good catch will make change	Accept Change
PA	Comment	6) In Section 8.2, 2nd sentence, revise from "dip tank" to "asphalt tank" to be consistent with text in Section 5.	Good catch will make change.	Accept Change
PA	Comment	7) In Section 8.2, 2nd sentence, revise from "dipping process" to "insertion process" to be consistent with text in Section 6 which does not refer to "dipping".	Good catch will make change.	Accept Change
Item No.	**Description**			
2	**Reconfirm M 219-92 (2012)**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
PA	Affirmative Comment	1) In Note 3 (Section 5.3), next to last line, revise from "his design calculations" to "the design calculations".		Accept Change
Item No.	**Description**			
3	**Reconfirm M 243-96 (2012)**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
SC	Affirmative Comment	Section 4.1 requires a minimum thickness of the asphalt mastic of 1.27 mm. Should a method be specified for this measurement	Probably yes. Same comment in M190.	Will incorporate a method of measurement. Assigned to TF 2017-1
PA	Affirmative Comment	1) Attached m 243.docx file only include 2 pages of the standard. It is assumed that the full numbers of pages of the	Correct.	M 243 is only two pages therefore

		standard are up for reconfirmation and not just the first 2 pages of the standard.		this standard is reconfirmed. Will Publish standard with thickness changed to 1.3 mm.
PA	Comment	2) In Section 4.1, consider revising from "a minimum thickness of 1.27 mm" to "a minimum thickness of 1.3 mm" for this field-applied coating. The number of decimal places for a unit of measure in millimeters seems excessive and not practical for verifying coating thickness for a field-applied and assumed field measured coating thickness.		Accept comment. Will list minimum thickness as 1.3 mm in published standard.
Item No.	**Description**			
4	**Reconfirm M 252-09 (2012)**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
PA	Comment	Affirmative with comments: 1) In Section 3.3, revise definition of crease to be "a visible irrecoverable indentation" to be consistent with the definition recently proposed for M 294.	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M252 without any revisions. Will refer comment to TF 2017-2 for TS and SOM ballot this year.
PA	Comment	2) In Section 3, consider adding a definition for "buckling" since "wall buckling" is proposed to not be a part of the definition for crease and wall buckling is referenced in Section 9.2.	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M252 without any revisions. Will refer comment to TF 2017-2 for TS and SOM ballot this year.
PA	Comment	3) In Section 3, consider adding a definition for "delaminations" to cover Type S pipe.	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M252 without any revisions. Will refer comment to

				TF 2017-2 for TS and SOM ballot this year.
PA	Comment	4) In Section 7.1.1., consider adding "delamination" to this section on visible defects.	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M252 without any revisions. Will refer comment to TF 2017-2 for TS and SOM ballot this year.
PA	Comment	5) In Section 9.2, should there be revisions to this section similar to the some of the revisions recently adopted or proposed for M 294 in regards to "wall buckling" and "unaided eye"?	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M252 without any revisions. Will refer comment to TF 2017-2 for TS and SOM ballot this year.
Item No.	**Description**			
5	**Reconfirm M 274-87 (2012)**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
		No Comments		Publish
Item No.	**Description**			
6	**Reconfirm M 289-91 (2012)**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
		No Comments		Publish
Item No.	**Description**			
7	**Reconfirm M 326-08 (2012)**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
PA	**Affirmative Comment**	Affirmative with comments: 1) In Section 1.3, last 2 lines, delete "Standard Practice for	Need to look at.	Will check with Publication staff.

		Insertion of Flexible Polyethylene Pipe into Existing Sewars".		
PA	**Comment**	2) In Section 3.3, consider revising definition of crease to "a visible irrecoverable indentation" for consistency with the definition of crease recently proposed for M 294 and to delete association with wall buckling.	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M326 without this change. Will refer suggestion to TF 2017-3 for TS and SOM ballots this year.
PA	**Comment**	3) In Section 7.5, should there be a time given to assess the pipe for wall buckling, cracking, or splitting (e.g., at peak load, immediately after peak load is reached, etc.)	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M326 without this change. Will refer suggestion to TF 2017-3 for TS and SOM ballots this year.
PA	**Comment**	4) In Section 9.2, last sentence, consider adding additional text to specify when to "Examine the specimen with the unaided eye for cracking or splitting". Possibly revise to "Immediately after the specimen has started to unload, examine the specimen with the unaided eye for cracking or splitting"	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M326 without this change. Will refer suggestion to TF 2017-3 for TS and SOM ballots this year.
Item No.	**Description**			
8	**Reconfirm M 330-13**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
PA	Comment	Affirmative with comments: 1) In Section 3, consider adding a definition for buckling.	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M330 without any changes. Will refer suggestion to TF 2017-2 for TS and SOM ballots this year.
PA	Comment	2) In Section 3.3, revise definition to read "a visible	These seem to be more	Will publish M330

		irrecoverable indentation" to be consistent with definition recently proposed for M 294 and to eliminate reference to wall buckling.	than editorial. Probably should go to TS ballot and then SOM	without any changes. Will refer suggestion to TF 2017-2 for TS and SOM ballots this year.
PA	Comment	3) In Section 3.4, 2nd sentence for Type D pipe, revise from "liner and/or outer wall" to "liner and outer wall".	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M330 without any changes. Will refer suggestion to TF 2017-2 for TS and SOM ballots this year.
PA	Comment	4) In Figure 1 and in the figures for both Type S and Type D, revise labels from "Inner Wall (Liner)" to "Inner Liner".	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M330 without any changes. Will refer suggestion to TF 2017-2 for TS and SOM ballots this year.
PA	Comment	5) In Section 7.2.2, revise from "Wall Thickness--The inner wall of Type S pipe, and both the inner and outer walls of Type D pipe" to "Liner Thickness--The liner of Type S pipe, and both liner and outer wall of Type D pipe". Also revise table column 2 title from "Wall Thicknesses, mm (in)" to "Liner Thickness, Min (with footnote a), mm (in.)". Add footnote a below table that reads "For Type D profile, the minimum liner thickness shall also apply to the outer wall."	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M330 without any changes. Will refer suggestion to TF 2017-2 for TS and SOM ballots this year.
PA	Comment	6) In Section 9.2, last sentence, consider adding additional text to specify when to "Examine the specimen with the unaided eye for cracking, splitting, or delamination". Possibly revise to "Immediately after the specimen has started to unload, examine the specimen with the unaided eye for cracking, splitting, or delamination".	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M330 without any changes. Will refer suggestion to TF 2017-2 for TS and SOM ballots this

				year.
PA	Comment	7) In Section 9.6.4, revise completely to read "Liner Thickness--Measure the liner thickness in accordance with ASTM D2122."	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M330 without any changes. Will refer suggestion to TF 2017-2 for TS and SOM ballots this year.
PA	Comment	8) In Section 9.7, 1st paragraph, revise from "between the inner and outer corrugated wall at the corrugation valley as shown in Figure 4" to "between the liner and corrugation valley as shown in Figure 4".	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish M330 without any changes. Will refer suggestion to TF 2017-2 for TS and SOM ballots this year.
PA	Comment	9) In Section 9.7, 2nd paragraph, revise from "between the inner and outer corrugated wall at the corrugation valley as shown in Figure 4" to "between the internal supports and the liner and outer wall as shown in Figure 4".	These seem to be more than editorial. Probably should go to TS ballot and then SOM	TS and SOM ballot? TF 2017-2
PA	Comment	10) In Section 9.9, last sentence, revise from "and wall design qualification" to "and wall profile design qualification" and from "in wall design" to "in wall profile design".	These seem to be more than editorial. Probably should go to TS ballot and then SOM	TS and SOM ballot? TF 2017-2
Item No.	**Description**			
9	**Reconfirm R 63-13**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
PA	Affirmative Comment	1) In Section 5.4.4, 2nd sentence, revise from "aboveground" to "above ground".		Accept Change
PA	Comment	2) In Section 7.2.1, Item #2, revise from "end of each finished" to "end of each finished product" to be consistent text in Item #4.		Accept Change
Item	**Description**			

No.				
10	**Reconfirm T 241-95 (2012)**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
		No Comments		Publish
Item No.	**Description**			
11	**Reconfirm for 1 year extension or revise MP 20-13 (2014)**			
State	**Vote**	**Comment**	**Chair Explanation**	**Resolution**
PA	Affirmative Comment	Affirmative with comments: 1) In Section 3.2.2, consider revising the definition of crease to read "a visible irrecoverable indentation" to be consistent with the definition of crease recently proposed for M 294 and to not associate a crease with shape stability.	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish MP 20 without any changes. Will refer suggestion to TF 2017-4 for TS and SOM ballots this year.
PA	Comment	2) In Section 7.7, 1st sentence, the term "breaking" is used, but this term is not defined in Section 3. If "breaking" will remain in Section 7.7, add the term "breaking" to Section 3 with its definition.	These seem to be more than editorial. Probably should go to TS ballot and then SOM	Will publish MP 20 without any changes. Will refer suggestion to TF 2017-4 for TS and SOM ballots this year.

Discussion: Tim Ramirez stated that the M252 and M330 changes were similar in nature to M294 changes and should be handled the same way and be balloted.

Resolution: A task force TF 2017-2 was formed with PA, MI, NY, Dan Currence (PPI), Brian Chestnut, Heather Christensen, Michael Pluimer, Jim Goddard and other industry members to work through the changes and submit a proposal for a technical section ballot on M252 and M330.

Discussion: On M326 changes were similar in nature to M294 changes and should be handled the same way and be balloted.

Resolution: A task force TF 2017-3 was formed with PA, NY, Dan Currence (PPI), Jim Goddard and other industry members to work through the changes and submit a proposal for a technical section ballot on M326.

Discussion: On MP 20 the suggested changes are similar in nature to those balloted M294 changes and if these apply to MP 20, they should be handled by TS ballot.

Resolution: A task force TF 2017-4 was formed with Darrell Sanders (Contech) and the stewards of MP 20 to work through the changes and submit a proposal for technical section ballot on changes to MP 20.

D. Task Force Reports

Task Force SOM_TS4b-1-2016 was created to review and prepare M 294 for SOM ballot. This task force completed that assignment and is retired.

V. New Business

A. Research Proposals

1. 20-7 RPS?
2. Full NCHRP RPS?

No Proposals to date

B. AMRL/CCRL - Observations from Assessments

1. **AASHTO Re: Source (formerly AMRL) is no longer conducting plastic pipe audits of DOT laboratories. These audits will now be conducted by NTPEP. There are currently seven states that will be having audits. They are Alabama, Illinois, Maine, Michigan, North Carolina, Pennsylvania, and Kentucky. If any other states are interested please contact Ryan Fragapane, rfragapane@aashto.org.**
2. **NTPEP has also started a corrugated metal pipe audit program. Audits for these program will begin in 2017.**

C. NCHRP Issues

Michael Pluimer "NCHRP 4-39 Update: Field Performance of Corrugated HDPE Pipe Manufactured with Recycled Content" – **Final report is almost complete and will be released to the panel within a week or so. It should be published this summer. Author is drafting a recommended practice for HDPE manufactured pipe with recycled materials. The draft includes a new practice for an un-notched constant ligament strength test. This test is being developed with ASTM first and then Michael will be working with AASHTO to see how it should be incorporated into standards. It is recommended that a webinar should be held to discuss the proposed changes sometime this spring or summer to cover specifics.**

D. Correspondence, calls, meetings, webinar,

1. **None**

E. Presentation by Industry/Academia

1. **None**

F. Proposed New Standards

1. **None**

G. Proposed New Task Forces

1. **TF 2017-1 M190/M243**
   Members are: Bill Bailey (VA), Tim Ramirez (PA), Mike McGough (NCSPA).

2. **TF 2017-2 M252/M330**
   Members are: Dan Currence (PPI), Tim Ramirez (PA), Therese Kline (MI), New York, Brian Chestnut (Lane), Heather Christensen (Prinsco), and Jim Goddard.

3. **TF 2017-3 M326**
   Members are: Tim Ramirez (PA), New York, and Jim Goddard

4. **TF 2017-4 MP20**
   Members are: Darrell Sanders and Stewards (MI and NC) of MP 20.

If you are interested in joining any of these task forces or you have been placed in the wrong task force please contact Bill Bailey

H. Standards Requiring Work this coming year

M190	Asphalt/Bituminous coated measurement method
M243	Asphalt/Bituminous coated measurement method
M252	Similar to M294 changes
M326	Similar to M294 changes
M330	Similar to M294 changes

MP020 – 1 year extension and needed additions

I. SOM Ballot Items (including any ASTM changes/equivalencies)

VI. Open Discussion

A. None

VII. Adjourn