

MEETING MINUTES FROM THE
MARICOPA ASSOCIATION OF GOVERNMENTS
STANDARD SPECIFICATIONS AND DETAILS COMMITTEE

July 10, 2013

Maricopa Association of Governments Office, Ironwood Room
302 North First Avenue
Phoenix, Arizona

AGENCY MEMBERS

Jim Badowich, Avondale, Vice Chair	Dan Nissen, Peoria
Craig Sharp, Buckeye (proxy)	Syd Anderson, Phoenix (St. Trans.)
Sheina Hughes, Chandler (proxy)	Jami Erickson, Phoenix (Water)
* Antonio Hernandez, El Mirage	Rodney Ramos, Scottsdale
Tom Condit, Gilbert	Jason Mahkovtz, Surprise
Mark Ivanich, Glendale	Ken Halloran, Tempe, (proxy)
Troy Tobiasson, Goodyear	* Harvey Estrada, Valley Metro
Bob Herz, MCDOT	* Gregory Arrington, Youngtown
Bob Draper, Mesa	

ADVISORY MEMBERS

Jeff Benedict, ARPA	Jeff Hearne, ARPA
Tony Braun, NUCA	Peter Kandarlis, Independent
Slade Ottney, NUCA	Paul R. Nebeker, Independent
Amanda McGennis, AGC (proxy)	* Jacob Rodriguez, SRP
Brian Gallimore, AGC	

MAG ADMINISTRATIVE STAFF

Gordon Tyus

* Members not attending or represented by proxy.

GUESTS/VISITORS

John Bacigalupi, Contech
Jared Dusha, Contech
Art Glover, FCDMC
Mike Hook, ACPA
John Kanzleamar, Contech
Yannick Mets, Gilbert
Arvid Veidmark, Specialized Services Co.
Steve Waller, Rinker

1. Call to Order

Vice Chair Jim Badowich called the meeting to order at 1:32 p.m. Mr. Badowich welcomed Sheina Hughes, proxy for Warren White of Chandler and Ken Halloran, proxy for Tom Wilhite of Tempe.

2. Call to the Audience

Vice Chair Badowich opened the call to the audience. No members of the audience requested to speak.

3. Approval of Minutes

The members reviewed the June 5, 2013 meeting minutes. Troy Tobiasson introduced a motion to accept the minutes as written. Bob Herz seconded the motion. A voice vote of all ayes and no nays was recorded.

Review of 2012 Carry Forward Cases

4. Case 12-12: Steel Reinforced Polyethylene Pipe

Add new Section 739 for Steel Reinforced Polyethylene (SRPE) Pipe. Sponsor Rod Ramos said the latest draft was in the agenda packet. It addressed a few minor comments from the previous meeting and was discussed during the last water/sewer working group meeting. He noted there had been some discussion about limiting the size of the pipe. He said the material references ASTM and the design uses AASHTO bridge specifications. Mr. Ramos reviewed existing pipe sections and reported that MAG did not limit the size of reinforced concrete pipe, since it references ASTM C76, which already specifies size limitations. He said the same is true of non-reinforced concrete pipe in Section 736 which references ASTM C14. The HDPE specification currently has a limit of 120". He said Scottsdale has used SRPE up to 72" in diameter and he thought Glendale has also used larger sizes.

To be consistent with other sections, Mr. Ramos suggested removing any mention of size limitations, so that the MAG specs would not have to be updated as the ASTM that it references is updated. He asked for a straw poll of voting members to judge their preference on the size limitations of the pipe: none, 120" or 60" in diameter. Bob Herz said he was okay with the 120" size. Dan Nissen suggested not specifying a size in order to be consistent with other pipe sections. Jim Badowich noted that there were size limitations on other pipes such as for water distribution. Bob Draper moved to accept the case with the removal of the size limitation. Rod Ramos seconded the motion. Further discussion continued.

Bob Herz requested to add the requirement that the pipe design comply with the AASHTO LRFD Bridge Design Specifications. John Kanzlemer said he had no problem adding the reference, stating that SRPE currently meets AASHTO LRFD Bridge Design Specifications, Section 12.

Mike Hook, representing the Concrete Pipe Association, said they do not recommend using the pipe for sizes greater than 60” because it has not been approved by AASHTO highway specifications. He asked why the county thought of limiting the size during last month’s discussion, but now does not. Mr. Herz said he did further research since the last meeting and found the increased size to be acceptable. Rod Ramos said he wants to increase competitive bidding on larger diameter jobs, and believes the concrete pipe manufacturers object to the use of SRPE at larger sizes as a way to reduce competition in this area. Mr. Hook asked how many manufacturers there are for SRPE. Mr. Herz said that currently he knows of one, but said that by including the material specifications in MAG, it would open up the market to more manufacturers. That is one of the reasons he wanted to add the reference to the AASHTO design requirements in the new specification to ensure that other manufacturers using it will design pipe comparable to that currently being used.

Jim Badowich said the water/sewer working group is working on the installation and testing requirements and believes the testing will be more stringent. Peter Kandarlis summarized the changes to the case to remove the size limit of 120” and add the requirement for pipe design to comply with the AASHTO LRFD Bridge Design Specifications. The maker of the motion and second agreed to the changes and Vice Chair Badowich called for a vote. A voice vote was taken. The case was approved, 10 yes, 0 no, 3 not present. Three members abstained, Avondale, Buckeye and Phoenix.

New 2013 Cases

5. Case 13-01 A-L: Miscellaneous Corrections

One new corrections case was added, 13-01K, which corrected some text display errors in Detail 391-1. Rod Ramos said that in his review of other pipe sections, he found an error in the second paragraph of Section 735.1. The text says “to be finished” when it should say “to be furnished.” He suggested adding this to the list of corrections as letter L. Since this was the last month to add new cases, Troy Tobiasson suggested the committee vote on all the correction cases at the next meeting.

6. Case 13-08: Revision to Section 321.8.8 Thickened Edge

Eliminate references to ‘base course’ to clarify the surface being referenced. Bob Herz said he passed out a new version before the meeting that had one change, and included a couple of photos showing the installation of the thickened edge on a new roadway. The change to the text in Section 321.8.8 was to add the following sentence in order to clarify the asphalt timing issue discussed at the last meeting. “Placement of tack coat on the surface of the compacted thickened edge asphalt may be omitted when additional asphalt pavement is placed on the same day and the Engineer agrees that the surface of the thickened edge asphalt has remained clean.”

Since there was no further discussion, Mr. Herz proposed to vote on the case at the next meeting.

7. Case 13-09: Revision to Section 321 Asphalt Penalty Tables

Raise penalties in tables based on City of Mesa supplement. Bob Draper said that he missed the last asphalt working group meeting where the case was discussed, and received a modified version from the working group. He has been reviewing it and will be at the next asphalt working group meeting to hash out differences and hopefully come back with an updated version in August for the committee to discuss, with the goal to vote on the case during the September meeting.

8. Case 13-10: Revision to Section 301.7 (Subgrade Preparation) MEASUREMENT

Add subgrade preparation measurement for graded non-surfaced areas designated for vehicle traffic (driveways and roadways). Bob Herz said there were no changes since the last meeting, and if there was no further discussion, he would move to accept the case as submitted. Bob Draper seconded the motion. Rod Ramos asked if it was clear what was meant by the phrase “accepted surface area.” Other members thought it was clear to them. A voice vote was taken. The motion passed: 12 yes, 0 no, 1 abstain, 3 not present.

9. Case 13-12: Revisions to Section 340: Concrete Curb, Gutter, Sidewalk, Sidewalk Ramps, Driveway and Alley Entrance

Incorporate agency supplements and update Section 340 to current practice. Peter Kandarlis provided a new handout during the meeting that incorporated comments from the last meeting. He went over the changes that were summarized on the cover memo provided. Per suggestion from the water/sewer group, he changed the reference for concrete curb cuts to Section 336.2.2.

There was extensive discussion on the second point describing changes related to subgrade preparation. He discussed how he tried simplifying Section 340.3.1. Section 301 is the controlling section for subgrade preparation, but there were two concepts to be addressed in Section 340. The first was soft and unsuitable materials. These would be dealt with in the same manner as in Section 301. The second was expansive soils. A table showed different remedies based on the percentage of swell, including removal of 24” of subgrade for expansive soils. This requirement was taken from the county supplement. Brain Gallimore thought that 24” was excessive and many members agreed, since they typically remove between 6” to 12”. Bob Draper asked who identifies when a soil is expansive – what tests are done? Jim Badowich said most cities require a soil report on developments. Craig Sharp said inspectors can do a swell test if they believe the soil is expansive. One suggestion was to make the removal 6” in either case of unsuitable or expansive soils. Mr. Kandarlis said Section 301 does not address expansive soils, so you would still need options for marginally expansive soil treatments. Bob Draper suggested relating it to the P.I. to determine the limits. Peter Kandarlis said he would research this option further.

He then went on to highlight the other changes including deleting the 25' spacing of joints in curves, adding language to require contraction joints in curbs and gutters to match sidewalks, and deleting the ADA ramp repair guidelines. Bob Herz clarified that matching the joints in curbs would only be necessary when the sidewalk is attached. He also thought the details drawings, such as 221, be reviewed to ensure they match any changes made to the joint spacing. Mr. Kandarlis said he would review the details as well, and planned to discuss the case further at the next concrete working group meeting. He hoped to finalize any changes to the case so it could be voted on next month.

10. Case 13-13: Revisions to Section 415 Flexible Metal Guardrail

The purpose was to allow use of either 8"x8" or 6"x8" wood posts for continuous guardrails, and delete reference to manufacturer's recommendations. Bob Herz said there were no changes since the last meeting, and asked for any comments. Seeing no further discussion Mr. Herz moved and Troy Tobiasson seconded a motion to accept case 13-13 as presented. A voice vote was taken. The motion passed: 13 yes, 0 no, 0 abstain, 3 not present.

11. Case 13-14: Revisions to Section 711 Paving Asphalt

Revise Section 711 to update AASHTO references and add a new polymer modified section. Jeff Benedict said he received comments today from Maricopa County suggesting addition of a parameter for solubility testing. Mr. Benedict said due to these comments he would like to postpone the vote until next month so they can discuss the changes at the next asphalt working group meeting. Ms. McGinnis advised against adding solubility tests because she believed it would shut out certain kinds of materials and limit competition.

12. Case 13-15: Revisions to MAG Sections 603, 615 and 618 for Flexible Pipe.

Update pipe installation requirements to allow for flexible pipe types. Sheina Hughes, filling in for Warren White, reviewed a handout provided at the meeting that gave additional information on the progress of the case. She explained that the goal was to separate rigid and flexible pipe installation and to update the specifications. This included definitions and details. The handout included a page of definitions that clarify the trench excavation and backfill terms and more closely match those used by ASTM. The terminology would be updated in the specifications and also details. Suggested changes to Details 200-1 and 200-2 were provided, which included a new trench cross-section detail.

Jim Badowich said the water/sewer working group was continuing to review and update this case. He talked about deliberations over the best location for specifications relating to initial backfill and final backfill, and asked the committee for input.

Rod Ramos asked if you could limit the pavement removal based on thickness of the pavement. He said they have some areas of very thick pavement, and do not always want to remove it. Peter Kandarlis said he still had a table from a previous case updating detail 200-1 and would review it.

Bob Herz asked how you can test compaction at the haunches. Bob Draper said you can test it at the spring line, and use that as a proxy, but he agreed there is no perfect way to test the haunches area. Jim Badowich said that is why many agencies are using CLSM as a backfill option. The case would continue to be reviewed by the working group.

13. Case 13-16: Revision to Section 602; Trenchless Installation of Steel Casing

Retitle and revise Section 602 to match current industry standards. Jim Badowich said there were no changes at the last working group meeting. He asked Arvid Veidmark, who helped develop the case, if he had any comments. He said that they added the option of mechanical seals instead of bulkheads. When asked about the use of grout in a current project, he suspected that they were just following the existing Section 602 requirements, but that it was recommended in the revised specifications to use spacers and 3/8" pea gravel instead. Jami Erickson asked if any details were included. Mr. Veidmark said details for the bulkheads and spacers could be included. Jim Badowich said he was getting feedback from others in Avondale and planned for a final version for review next month with a vote planned for the September meeting.

14. Case 13-17: Revision to Section 430.4 DECOMPOSED GRANITE AREA

Eliminate placement of polyethylene below decomposed granite. Since there were no changes or comments, Bob Herz moved to accept the case as presented. Rod Ramos seconded the motion. A voice vote was taken. The motion passed: 13 yes, 0 no, 0 abstain, 3 not present.

15. Case 13-18: Revisions to Detail 250-1 Driveway Entrances with Detached Sidewalk.

Incorporate 2012 revisions made to Detail 250-2 into Detail 250-1. Bob Herz said there were no changes since last month, only that the detail drawing had been updated to include the proposed changes. Brian Gallimore asked about the 2% maximum slope. Mr. Herz said that was the maximum now allowed by ADA. Dan Nissen noticed that the word "FOR" was removed on the note on the plan view, but not on the elevation view. Mr. Herz agreed it should be deleted to be consistent. Jason Mahkovtz asked if there could be a conflict between keeping a 2% slope on the driveway portion and having it match the top of curb. Rod Ramos suggested removing the 2% and just showing that it is sloped was enough to ensure drainage and allow the driveway to be designed as needed for the site. Mr. Herz moved to accept the case with the two changes described. Rod Ramos seconded the motion. A voice vote was taken. The motion passed: 13 yes, 0 no, 0 abstain, 3 not present.

16. Case 13-19: Revisions to Section 345 - Adjusting Frames, Covers, Valve Boxes, and Water Meter Boxes.

Add the process of lowering and update the section for current practices. Brian Gallimore said he received comments from Maricopa County regarding pre-lowering utilities for new roadways in addition to milling operations. He questioned if this was necessary on new construction. There were also questions about the use of rebar in concrete collars, used to increase their strength. Jami Erickson asked if he was planning to make any changes to Detail

391. If not the water/sewer group would likely be revising the detail in the future. He said he currently was not changing the detail, but encouraged the working group to review it. Mr. Gallimore said they planned to discuss the case at the next working group meeting. Mark Ivanich asked about waiting to make adjustments before the final lift. Examples were given on past Phoenix developments where the final asphalt paving was not done until home construction was completed. Brian Gallimore also noted that some cities don't want the collars raised so they are not seen. Jami Erickson said it actually makes manholes easier to identify when the collars are visible.

17. Case 13-20: Make Section 610 Hydrostatic Test Methods consistent with AWWA C600-10.

Update MAG Test Methods to match AWWA standards. Troy Tobiasson described that the main purpose of the changes to Section 610 were to meet AWWA standards. There were some other minor changes he noted such as removing asbestos pipe and adding PVC pipe. Bob Herz recommended removing the text "the current" and "at the time the Project begins" from the 3rd sentence of 610.3 (B). There was also a question about what a "major" street is under 610.4. Jami Erickson said most subdivisions do not have profile plans for water lines less than 12". Members discussed how to ensure minimum cover above water lines. Mr. Herz asked about including PVC pipe in the specification. Mr. Badowich said it is used occasionally in developments and fire lines.

Mr. Tobiasson then went on to describe the changes to the hydrostatic testing formula. The new formula is used by Phoenix and meets AWWA standards. The current formula in MAG allows for more leakage. The revised specification has testing allowances, but does not refer to leakage allowance. He said the test is designed with no more the 5% above the 200 psi testing pressure to stop contractors from raising the pressure high enough to still be above 200 psi after the test, even with greater pressure loss. Paul Nebeker said testing pressure can vary greatly based on the temperature. Craig Sharp said they had problems with freezing water when testing in Northern Arizona, and had to heat the pipe during the test. Mr. Nebeker said much of the testing came about due to inferior pipe that is no longer used. He also said that ductile iron pipe can be fragile. If not handled correctly, it can break and leaks can result.

Mr. Tobiasson said the case would be reviewed again at the water/sewer working group. He planned to get a final version of the case ready for a vote during the next meeting, focusing on updating MAG to meet the AWWA requirements. He said he is continuing to review Section 610 as a whole, and would appreciate other comments and corrections, although they may have to wait to be incorporated in a new case next year.

18. Case 13-21: Create a new Section 742 Pre Cast Manhole Bases. Add detail drawings for construction and installation.

Create a new section and details for pre-cast manhole bases. Craig Sharp introduced the case at the last meeting and asked for comments. Seeing no comments he went on to discuss the next, related case.

19. Case 13-22: Update Sections 625 and 775 to remove references to the use of bricks in manholes and remove references to manhole steps.

Update Sections 625 Manhole Construction to remove references to the use of bricks and manhole steps. Also remove these references in Section 775 Brick and Concrete Masonry Units. Craig Sharp said the second case removed references to bricks and steps in manholes. Bob Herz said the detail drawings would need to be reviewed so they don't reference non-existing specifications. Jim Badowich said they were planning updating the manhole details 420-1 and 420-2 as well and adding them to this case. Details 421 and 422 also will need to be reviewed.

Bob Herz asked for any reference to "bid price" be changed to "contract unit price" since not all contracts are bid.

There was discussion if agencies have separate pay items for installing the manholes and adjusting them. Glendale and Mesa representatives said they don't pay separately, while other agencies did. Mr. Badowich said Avondale has them as separate pay items because they are typically done by different contractors. Also, it was difficult to track which manholes were new installs, and which were adjusted only.

Jeff Hearne alerted Mr. Sharp to a typo in the precast section. Mr. Badowich said the case would be discussed at the water/sewer meeting and the related details would also be revised.

20. Case 13-23: Update and Revise Section 309 – Lime Stabilization or Modification of Subgrade.

Clarify use of lime for stabilization and modification purposes. Brain Gallimore said he received a new comment from the city of Phoenix, and planned on reviewing the case and making final updates at the next materials working group meeting.

21. Case 13-24: Update Detail 270 Frame and Cover.

Make the depth of the cover 4", remove the chain attachment, and make drafting corrections to Detail 270. Bob Herz presented a new copy of the case at the meeting. The main purpose was to remove the chain attachment. The hole in the lid for attachment of the chain caused a weak spot in the lid which would sometimes break. Increasing the cover to 4" in depth would assist in making certain the lid would stay in place. The update included a manufacturer's drawing of the frame and cover for informational purposes. The depiction of the Detail 270 frame and cover shown in Detail 391-1 is to be revised to show the increased lid depth. He also explained additional changes that the city of Phoenix made in their supplemental detail.

Members discussed the methods used by the Phoenix detail to strengthen the concrete collar including using rebar, scoring and high-early concrete. The purpose of these measures was to allow traffic back on the road more quickly. The Phoenix revisions are not being included as part of the proposed changes.

Bob Draper suggested combining Section A-A and B-B on one drawing. Mr. Herz said the fillet dimensions could be shown on a blow-up. He hoped to have revisions to the drawings ready for the next meeting.

22. Case 13-25: Revise Section 729 Expansion Joint Filler.

Delete out of date specifications, and reference current active ASTM standards. Jeff Hearne explained that most of the material in this section was out of date, so the case deletes most of it, but it does leave in references to active ASTM standards. Bob Herz suggested the pour type joint filler requirements be modified to add the ADOT restrictions. Mr. Hearne said the case would be discussed at the next concrete working group meeting.

23. New Cases for 2013

No additional new cases were introduced.

24. Working Group Reports

Vice Chair Badowich began the working group reports.

a. **Water/Sewer Issues Working Group**

Jim Badowich said the group met June 18th at 1:30 p.m. in the MAG Chaparral Room. He said most cases the group reviewed were already discussed. He said one of the new items discussed was a method of valve box stabilization. Jamie Erickson described a product the City of Phoenix is using that helps keep valves installed vertically, rather than leaning at an angle. The group will continue to review active cases, as well as work on manhole details. The next meeting is scheduled for July 23rd at 1:30 p.m. in the MAG office.

b. **Asphalt Working Group**

Jeff Benedict said the group met June 13th at noon at the ARPA offices, and that the notes were included in packet. He said they would be reviewing the penalty tables and other cases discussed during the meeting. The next asphalt working group meeting is planned for July 25th at noon at the ARPA office.

c. **Materials Working Group**

Brian Gallimore said they would be working on finalizing the lime specification and the specifications for adjusting manholes. The meeting would follow the asphalt working group.

d. **Concrete Working Groups**

Jeff Hearne said the meeting notes were included in the package. He said they would continue to review active cases for Section 340 and Section 729. He said the changes to Section 324 were tabled while the active cases are completed. The next meeting is scheduled for July 25th at ARPA following the materials working group at about 1:30 p.m.

e. **Outside Right-of-Way Working Group**

Peter Kandaris said he met with members before the committee meeting. He noted that as the MAG specifications have been updated, they seem to be less of a need for modifications just for the outside ROW. The main area of difference seems to be in the earthwork section. He suggested that instead of creating a separate document, we may just want a supplemental section to the MAG book that focuses on agency supplements made for areas outside the right-of-way. Jim Badowich asked about including backfill protection. Mr. Kandaris said he currently doesn't have information on them. Mr. Badowich commented that some fire lines are using reduced pressure when fire retardant additives are used. Mr. Kandaris said the next meeting will be on August 8th at 12:30 p.m. prior to the regular committee meeting.

25. General Discussion

Vice chair Badowich asked for general discussion items. Bob Herz said he was reviewing Case 13-05 that was approved last month, and asked if he could get a copy of the currently unpublished AASHTO M 330 standard that was referenced. Sheina Hughes (Chandler) said she would provide Mr. Herz the information.

26. Adjournment:

Seeing no further business, the vice chair adjourned the meeting at 4:10 p.m.