

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

June 4, 2014

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

AGENCY MEMBERS

Jim Badowich, Avondale, Vice Chair	Julie Christoph, Mesa
Craig Sharp, Buckeye	Dan Nissen, Peoria
Warren White, Chandler	Syd Anderson, Phoenix (St. Trans.)
Antonio Hernandez, El Mirage	Jami Erickson, Phoenix (Water)
* Wayne Costa, Florence	* Rod Ramos, Scottsdale (proxy)
* Tom Condit, Gilbert	Dan Shaffer, Surprise (proxy)
Mark Ivanich, Glendale	Tom Wilhite, Tempe, Chair
* Tom Vassalo, Goodyear	* Harvey Estrada, Valley Metro
Bob Herz, MCDOT	Gregory Arrington, Youngtown

ADVISORY MEMBERS

Jeff Benedict, ARPA	Jeff Hearne, ARPA
Arvid Veidmark, AZUCA	Peter Kandarlis, Independent
* Mike Sanders, AZUCA	Paul R. Nebeker, Independent
Adrian Green, AGC	Jacob Rodriguez, SRP
Brian Gallimore, AGC	

MAG ADMINISTRATIVE STAFF

Gordon Tyus

* Members not attending or represented by proxy.

GUESTS/VISITORS

Jim Anderson, Olson Precast
Arturo Chavarria, Hanson Pipe
Bill Davis, ADS
Mike Molina, Oldcastle Precast
Stew Waller, Rinker

1. Call to Order

Chair Tom Wilhite called the meeting to order at 1:33 p.m.

2. Call to the Audience

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

3. Approval of Minutes

The members reviewed the May 7, 2014 meeting minutes. Gordon Tyus said Tom Vassalo of Goodyear was at the last meeting and needed to be added to the list of attendees. Bob Herz said the last sentence under the Case 13-21 summary should read: "He asked if it mattered how the sections and bases were constructed as long as the standards are met." Dan Nisson introduced a motion to accept the minutes with the corrections noted. Bob Herz seconded the motion. A voice vote of all ayes and no nays was recorded.

Carry Forward 2013 Cases

4. Case 13-15: Revisions to MAG Sections 101, 601, 603, 615 and 618 for Rigid and Flexible Pipe. Updates to Details 200-1 and 200-2.

Update pipe installation requirements. Warren White provided an update to Case 13-15 at the meeting that included the most recent revisions of Sections 101, 601, 603, 615 and 618 along with Details 200-1 and 200-2. He said the Sections that changed were 101, 601 and 603. Mr. White said he is keeping Sections 601 and 603 in sync. The main differences between the two are in the description section and the trench width tables, as well as not allowing native fill for flexible pipe types. The revision incorporated comments from MCDOT and discussion from the last water/sewer working group meeting.

The working group agreed to keep water consolidation (jetting) in the spec, but wanted guidance on its use. Mr. Badowich said they added a maximum of 3' lifts. Mr. White asked the committee for feedback on increasing the testing requirements. There was discussion whether to double the testing frequency, refer to the geotechnical soil report, or leave it to the discretion of the engineer. Mr. Badowich recommended doubling the testing (which would then be done at every 250'). Mr. Herz said you may need to test it at different depths to make sure it meets compaction throughout. Brian Gallimore thought that using the soil report could be helpful. He also suggested rewording a line so that if water consolidation is not successful, mechanical compaction would be used to meet compaction requirements. Warren White said he would incorporate these recommendations in the next version.

He next described changes to the compaction density table. Bob Herz asked why the compaction requirement increased from 90% to 95%. Mr. White said that 95% was typical in field compaction results, and many agencies such as Phoenix and Chandler already require 95%. Also the working group believed it would provide a better product, and be less likely to

settle. Jim Badowich said he suggested going up to 97% since most of his testing results were that high. Brian Gallimore said they typically shoot for 97% compaction so they have better certainty of meeting the 95% compaction requirement. Peter Kandaris asked about the use of the term “pipe” and if it included conduit. Most members believed conduit would be considered a type of pipe. Mr. White noted that the Type III requirements (around structures) were changed to have 95% compaction for ABC, 100% for native or to use CLSM.

The last major item of discussion on Case 13-15 was the last paragraph of 601.2.2, the trench width tables, and what to do with embankment failure situations. Bob Herz asked what was meant by a “higher bedding factor.” Although this language is in the current spec, representatives from industry suggested removing it since the bedding factor is part of the pipe design requirements, not related to final construction. There was discussion about what to do if the trench was wider than allowed, due either to contractor error or embankment failure due to poor soils or weather conditions. Bob Herz said he thought the spec should detail what should be done. Jami Erickson asked if work should stop until the engineer is consulted. Jim Badowich said typically slurry is used, especially if the trench is undermining existing pavement. Brian Gallimore said he thought the maximum trench width was mainly to establish the pay widths. He said that using a trench box and compacting AB can also correct the problem in some instances and slurry is not always required. Jim Badowich proposed adding language to use slurry in case of safety issues or undermining pavement and allow AB for other conditions. Jami Erickson said that if the trench is too wide there can be loading issues on the pipe that may need the engineer to redesign. Warren White asked members to continue to review and provide comments back to him.

5. Case 13-21: Create a new Section 742 Pre Cast Manholes. Add detail drawings for construction and installation. Update existing manhole details.

Update specifications and details for pre-cast manhole bases and other corrections. An updated version of Section 742 Precast Manholes was provided in the packet. This new version changed the title of Section 742 to reflect that it provides specifications for the entire precast manhole. Craig Sharp said he changed Detail 422 to add the adjusting ring detail. He said the details were discussed during the last working group meeting and updated according to the group’s recommendations. On Detail 420-2 the bell was removed from the picture and note #14 was revised. Bob Herz said that Detail 420-1 needed to show details for the cast-in-place base such as the shelf. Mr. Sharp said he could refer to Detail 420-3. Dan Shaffer found a typo in note #13 of Detail 420-2. Bob Herz said the note “medium broom finish” on Detail 422 did not need to point to the plan view. He also asked if the manhole penetration spec in Section 742 should be duplicated in Section 625 for penetrations done in the field. Mr. Herz also wondered if gaskets should be part of the construction spec. Mr. Sharp said typically gaskets are built-in at the factory, but sometimes they are added in the field, and he would review these issues. Finally Mr. Herz suggesting adding a note for the grouting around the adjustment ring and cover to make a water-tight seal.

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

Craig Sharp said he received no comments since the last meeting. Bob Herz proposed changing the title to “Sanitary Sewer and Manhole Construction.” He also suggested removing Section 625.2 completely since brick manholes are no longer allowed. Mr. Herz also had a question on Section 725.1.1 regarding types of bricks. There are still references to using bricks in Details 301, 346, etc., but it is not clear what kind of bricks should be used. The section includes bricks previously used for manholes as well as building bricks and facing bricks. He felt that type of bricks used for specific applications should be clearer. Mr. Sharp said he would research the ASTM specs for the different brick types.

New Cases for 2014

7. Case 14-01: Miscellaneous Corrections.

Two new correction cases were introduced. Mr. Herz said members could refer to the case descriptions.

- A. *Change "transverse" to "longitudinal" in Section 321.8.2.*
- B. In section 739.1, delete the extra occurrence of the word ‘Pipe’.
- C. Delete “OR BRICK” from the title of Section 342.

8. Case 14-02: Revisions to Section 405 Monuments and Detail 120.

Update specifications to match current details and requirements. Mr. Herz said he corrected the note so that Type C monuments would not be used for subdivision corners. Mr. Herz asked for comments and seeing none, he moved to approve Case 14-02 as presented. Jim Badowich seconded the motion. A roll call vote was taken. ***The case was approved: 12 yes, 0 no, 0 abstaining, 5 not present.***

9. Case 14-03: Updates to Guardrail Details.

Make revisions to Section 415 and/or include guardrail details in MAG. Bob Herz said there were no changes since the last meeting since Maricopa County hasn’t revised their details yet.

10. Case 14-05: Revisions to Section 324 Portland Cement Concrete Pavement (PCCP).

Use compressive rather than tensile strength tests, modernize and reorganize section as needed. Jeff Hearne said he received revisions from Bob Herz prior to the meeting. Mr. Hearne said most of them were editorial, only a couple changes were substantive. Mr. Herz had a change to the second paragraph of 324.3.5 to make sure that the contractor does not change how the construction joints are placed, but go back to a previous joint. In another section he wanted to make it clear details can be shown on the plan documents. Julie Christoph asked that these changes be shown on a final clean copy for members to review before voting. Mr. Hearne agreed to make the changes available and postpone a vote until next month.

11. Case 14-06: Revisions to Section 718 Preservative Seal for Asphalt Concrete.

Update the specifications for the Type C preservative seal. Jeff Benedict said this case was discussed at the last asphalt working group meeting, attended by Sam Haddenson of Western Refining. Mr. Haddenson volunteered to review and update the specification, but it was determined that a full rewrite would be required. The revised spec will include the most commonly used products based on a poll of MAG agencies. Mr. Benedict said a couple products are no longer used and a couple new items will be added. The case will be discussed at the next asphalt working group meeting.

12. Case 14-07: Revision to Section 735 Reinforced Concrete Pipe and Section 618 Storm Drain Construction.

Add Elliptical and Arch Reinforced Concrete Pipe. Bob Herz said he has not received any comments, and asked if there were any. Seeing none, he moved to approve Case 14-07 as presented. Gregory Arrington seconded the motion. A roll call vote was taken. ***The case was approved: 12 yes, 0 no, 0 abstaining, 5 not present.***

13. Case 14-08: New Section 607: Trenchless Installation of Smooth Wall Jacking Pipe.

Included are revisions to Section 618: Storm Drain Construction. Jim Badowich said a revised version of Section 607 was handed out at their place. The only revision was to add other materials which could be used as casing. Bob Herz said the case also needed to include changes to Section 618.4 that deleted the old information and referenced the new Section 607. Arvid Veidmark agreed that the case included the revision to 618.4. Bob Herz suggested rewording 607.2 MATERIALS section to make concrete pipe the default. The revised language would read, "The jacking pipe shall be tongue and groove smooth wall reinforced concrete pipe per ASTM C76 class V unless vitrified clay pipe per ASTM C1208 or centrifugally cast fiberglass reinforced polymer mortar pipe per ASTM D3262 is approved by engineer."

Jim Badowich moved to approve Case 14-07 with the changes noted above. Syd Anderson seconded the motion. A roll call vote was taken. ***The case was approved: 12 yes, 0 no, 0 abstaining, 5 not present.***

14. Case 14-09: Revision to Section 726 Concrete Curing Materials.

Replace discontinued AASHTO references with current ASTM standards. Bob Herz said the case replaced obsolete AASHTO standards with the current ASTM specification. Seeing no further comments, Mr. Herz moved to approve Case 14-09 as presented. Warren White seconded the motion. A roll call vote was taken. ***The case was approved: 12 yes, 0 no, 0 abstaining, 5 not present.***

15. Case 14-10: Include Language to Allow Use of Warm Mix Asphalt.

Update Sections 321 and 710. Jeff Benedict said the version in the packet includes comments received during the last meeting and was discussed during the last asphalt working group meeting. He said he received comments from MCDOT which improved the formatting of the tables and changes to Section 710. Adrian Green said there were questions about what happens after an additive is included regarding times and temperatures. The case is planned to be discussed further at the next asphalt working group meeting. He asked members to email Jeff Benedict with questions and comments prior to the next working group meeting.

16. New Cases

Tom Wilhite said there were five new cases, and asked sponsors to introduce them.

17. Case 14-11: Delete the use of Asbestos-Cement Pipe in Valve Box Installations.

Replace ACP with PVC C900 pipe in Detail 391-2 and make associated drawing changes to Details 391-1 and 392. Also update Section 610.7. Bob Herz introduced a new case to eliminate the use of asbestos-cement pipe because it is a hazardous material. The revision is based on the City of Phoenix Detail P1391 and makes 8" C900 PVC as the default sleeve in the revised Detail 391-2. Several agency members commented that other materials besides C900 PVC can be used, citing several examples. Mr. Herz asked if the sleeve fits in a groove of the present base. Paul Nebeker said that it does fit in the precast bases. Mr. Herz asked if bricks should be deleted as an alternative, and members agreed. He asked for feedback on Note #1 on Detail 392 regarding the required loading rate. He also asked about Note #2 on Detail 391-2 regarding how the joints are bonded together. Jami Erickson suggested using Phoenix's language for gluing the PVC joints together. Mr. Nebeker said the Phoenix method worked well. Mr. Herz asked members to review the proposed changes and send him any additional comments.

18. Case 14-12: Proposed Revisions to Sections 336.3 and 336.4.

Add pavement removal criteria to prevent full depth pavement cuts from being located within a lane wheel path and to prevent creation of narrow pavement edge strips. Bob Herz said the case was developed to add criteria to avoid full cut depths in the lane wheel path. The proposed case was discussed at the last asphalt working group meeting, and one potential problem was that the 2' minimum saw cut for curb replacement often ends up in the wheel path. The case tries to take this into account. Brian Gallimore said moving it to 4' can put it in the travel lane which could cause bumps if not constructed properly.

Jim Badowich suggested adding an option to 200-1 for patching milled areas which is now required when plating is done.

19. Case 14-13: Revisions to Section 321. Incorporate MCDOT Supplements.

Incorporate MCDOT enhancements to Section 321 PLACEMENT AND CONSTRUCTION OF ASPHALT CONCRETE PAVEMENT into the MAG Specifications. Bob Herz handed out a new case to modify Section 321. He said a list of the changes was outlined in the cover memo. The memo was followed by a strike-out version and a clean copy for members to review. He said this would continue to be a topic at the asphalt working group meetings and encouraged members to provide feedback and attend the meeting if possible.

20. Case 14-14: Consolidate all testing requirements in a new Section 611.

Create a new Section 611 and update existing specifications to delete testing specs and refer to the appropriate information in new Section 611. Jami Erickson handed out a proposed new case to consolidate testing requirements related to pipe installation into one section for easier reference. She reviewed what subsections were removed from current specifications and where they were placed in the new one. There was no change in the payment requirements. She said deflection testing for storm drains will be added in 611.4, and that this was the only new item, the rest of the case is just reorganizing existing specifications. Bob Herz commented that any revisions to 610.4 in Case 14-15 would need to be including in this one.

21. Case 14-15: Updates and revisions to Section 610.

Move Hydrostatic Testing from Section 610 to Section 611, update Table 610-1 to be consistent with AWWA, place Section 610 into sequential order. Jim Badowich introduced a new case from the water/sewer working group to make changes to Section 610. This case was supported by the work of Rob Godwin of Goodyear. One of the changes was to update the table of polywrap sizes to match those currently manufactured. Mr. Herz suggested removing the year from the ASTM standard reference so it stays up-to-date. Jami Erickson said they had issues with developers not using polywrap and asked if it should be required. Most agencies currently do require it, although Mr. Badowich questioned whether it was really needed unless alkaline soil types created the necessity.

Mr. Veidmark said you don't want to use polywap inside casing. Mr. Hernandez commented on some jobs they did using casing. Mr. Veidmark said the Union Pacific Railroad prompted ADOT to update their policy to leave the casing area empty so to would be easier to add a vent or allow easier repairs in the future.

22. Working Group Reports

Chair Wilhite asked for reports from the working group chairs.

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

Mr. Badowich said the group met on May 20th, and that most of their work was previously mentioned in the case discussions. He said they did a lot of work on the manholes case, and also are working on a new Section 608 for Horizontal Directional Drilling. Arvid Veidmark commented that he met with representatives from ASU and

industry and got valuable feedback. He hopes to introduce it as a new case at the next committee meeting. Mr. Badowich said the next meeting is scheduled for June 17th at 1:30 p.m. in the MAG office.

b. Asphalt/Materials Working Groups

Jeff Benedict said the notes from the previous meeting are in the packet. The next asphalt/materials working group meeting is planned for June 26th at the ARPA office at noon, and lunch will be provided. Brian Gallimore said the materials group would meet after the asphalt and that he planned to have a rough draft of Section 301 and 310 regarding rock correction procedures ready for discussion.

c. Concrete Working Group

The concrete working group followed the Asphalt/Materials working group meeting on May 22nd. Mr. Hearne said they continued working on revisions to *Section 725 Portland Cement Concrete*. He thought it would probably not be ready as a case until next year. Mr. Hearne said the next Concrete working group meeting would follow the Asphalt/Materials group on June 26th.

d. Outside Right-of-Way Working Group

Peter Kandarlis said he hoped to attend working group meetings next month and get feedback from the groups on specifications to be included in the Outside Right-of-Way document.

23. General Discussion

Chair Wilhite asked members for their thoughts on moving the July 2nd, committee meeting one week later to July 9th, due to the holiday weekend. Most members preferred the later date. Mr. White said he would be unable to attend on either day, and Mr. Kandarlis said he would probably call in if it was moved to the 9th. Since the consensus of the members was to move the meeting date to July 9th, Mr. Wilhite said that it would be rescheduled. He asked if any members could not attend to please let him know and to try and have a representative there so that the meeting meets quorum requirements.

Gordon Tyus asked members their thoughts on producing a new edition of the specs and details book in 2015 rather than another revision update. He said if all the cases currently under discussion pass, this would be a major update to the book. He said there also have been large revision packets during the last two years. When creating a new edition in 2012, members agreed that it made sense to release new editions more frequently. Since the cost of three update packets is about the same as a new book, the economic advantage of smaller revisions is also less important.

Mr. Tyus said they currently have sold out of the hard copies of specs and details book, and wanted to get feedback from the committee on whether a new edition was warranted, before ordering additional books that may not be current in six months. The consensus of the group

and chair was to go ahead and plan on creating a new edition for 2015, based on the expectation that many of the existing active cases will be approved.

Mr. Tyus also discussed different ideas for electronic and hard copy publishing. Some ideas included on-demand publishing rather than MAG keeping an inventory of hard cover books, using three-ring binding, electronic only publishing, and publishing as a paid mobile application that automatically updates.

Warren White said the Arizona Utility Coordinating Committee began discussing new policies for utility abandonment, and wanted committee members to be aware of this fact.

24. Adjournment:

Seeing no further business the meeting was adjourned at 4:03 p.m.