

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

June 1, 2011

Held at the Valley Metro Offices
101 1st Avenue, Phoenix
Suite 1100 - Lake Mead Room (10th Floor)

AGENCY MEMBERS

Jim Badowich, Avondale	Mike Samer, Mesa
Scott Zipprich, Buckeye	* Javier Setovich, Peoria (Proxy)
Warren White, Chandler	* Syd Anderson, Phoenix (St. Trans.)
* Dave Emon, El Mirage	Jami Erickson, Phoenix (Water)
Greg Crossman, Gilbert	* Marc Palichuk, Queen Creek
Tom Kaczmarowski, Glendale	* Rodney Ramos, Scottsdale
Troy Tobiasson, Goodyear, Chair	Jason Mahkovtz, Surprise
Bob Herz, MCDOT	Tom Wilhite, Tempe, Vice Chair

ADVISORY MEMBERS

Jeff Benedict, AGC	Jeff Hearne, ARPA
Tony Braun, NUCA	Peter Kandaris, SRP
* Kwigs Bowen, NUCA	Paul R. Nebeker, Independent
Brian Gallimore, AGC	Mike Smith, ARPA

MAG ADMINISTRATIVE STAFF

Gordon Tyus

* Members not attending or represented by proxy.

GUESTS/VISITORS

Bob Erdman, Cutler Repaving
Val Johnson, Sunbelts
JoAnn Lichty, Stronggo
Shawn Reach, TetraTech
John-Paul Reis, Sunbelts

1. Call to Order

Chairman Troy Tobiasson called the meeting to order at 1:35 p.m.

2. Call to the Audience

JoAnn Lichty of Stronggo introduced herself and was available for questions regarding the detectable warnings potential case.

3. Approval of Minutes

The members reviewed the May 4, 2011 meeting minutes. Tom Wilhite introduced a motion to accept the minutes as written. Greg Crossman seconded the motion. A voice vote of all ayes and no nays was recorded.

Review of 2010 and 2011 Cases

4. Case 10-05 – Revise FOREWORD

Clarify use of the MAG Specifications and Details for Public Works document. Peter Kandaris said he will date and distribute the latest version of the foreword. Troy Tobiasson reminded the committee that one purpose of the revision was to help clarify that the MAG specifications were provided for use in the right-of-way, not for other applications (as they are often used). Members asked if the draft should have a legal review. Mr. Tyus said MAG has an attorney on retainer and that he would ask to see if this was something that could be reviewed by MAG's legal counsel. Mr. Kandaris suggested the case should be ready for a vote during the August meeting.

5. Case 10-08 – Revise Section 717 Asphalt Rubber

Revise Section 717 ASPHALT-RUBBER to obtain a uniform specification. Bob Herz deferred to Jeff Benedict to provide an update on the asphalt working group's discussion with John Shi of MCDOT. Mr. Benedict said Mr. Shi agreed to leave the binder requirements alone, as long as the revised specification would give the county a wide enough window to allow lower voids. Mr. Shi plans to bring more info and mix designs from previous performing projects to the next asphalt working group meeting. Jeff Benedict agreed to provide revisions back to Bob Herz to incorporate in the current case.

6. Case 11-01: Miscellaneous Corrections

- a. **Case 11-01A – Correct the formula in Table 711-1.** No new comments provided.
- b. **Case 11-01B – Correct percentage in Table 705-1.** No new comments provided.
- c. **Case 11-01C – Correct reference in Detail 12.** No new comments provided.
- d. No new corrections were submitted.

7. Case 11-02 – Safety Edge Detail

Add an Asphalt Pavement Safety Edge option to Detail 201. Bob Herz said that he planned to revise the case to show three types of details. One would be the safety edge for an overlay. Two other options would also be developed for new construction, including one that would have an eight inch paving thickness. Brian Gallimore said he participated in the safety edge webinar sponsored by FHWA, and said it was very informative. As shown in the webinar, the slope varied from 25 to 40 percent depending on the constructability. The videos all showed overlay construction methods. It was noted that you need a stable edge so that the safety edge does not break away. Members suggested updates to the drawings could show separate edges details (specifying ways to construct the angle point).

8. Case 11-03 – Replace Cadmium Plated Bolts.

Replace cadmium plated bolts referenced in Section 610.13 with zinc plated bolts as described in ASTM-B633. Javier Setovich emailed Mr. Tyus stating that he would be unable to attend the meeting, but would have materials for the July meeting.

9. Case 11-04 – Deletion of Detail 190, Rock Correction Procedure

Replace reference to MAG Detail 190 in MAG Section 301. Delete MAG Detail 190. Peter Kandararis provided an update to the case that added the *ARIZ* abbreviation and the *Arizona Test Method* definition. This was needed since there are numerous references to both items throughout the MAG sections. Mr. Kandararis asked for comments on the case.

10. Case 11-05 – Deletion of MAG Section 225, Watering

Move MAG Section 225, Water Requirements into MAG Section 104.1.3. Peter Kandararis said the case incorporated comments from Maricopa County. He asked that the case be put up for a vote at the next meeting.

11. Case 11-06 – Deletion of Out of Date MAG Standards

Remove sections and details that are no longer used or refer to outdated technologies. Scott Zipprich provided an updated handout of the MAG specifications and details slated for deletion. Section 410 and Detail 150 (Precast Curbs) was deleted from the list (meaning it stays in MAG) since they are used by some agencies. Added to the list was *Section 323 Heater Remix Resurfacing*. This was recommended for deletion by the asphalt working group because it is an out-of-date process that does not meet current environmental standards. at the suggestion of the working group, Mr. Zipprich said he may add the terrazzo sidewalks to the deletion case.

Mr. Tyus suggested adding the sample forms and contracts from the front of the book (pages i-xv) to the deletion case. He said that most cities have their own contracts anyway, and as he was reviewing them he noticed they have not been updated since the 1998 edition was

published, and probably not for years prior to that. Tom Wilhite of Tempe said he wanted to check to see if Tempe referenced any of them. Members agreed that deleting the sample forms was probably a good idea since they were out-of-date and other standardized contracts were available to agencies that had not already developed their own. Mr. Zipprich said he would add the list of forms (by name) to the deletions case.

12. Case 11-07 – Revise Section 327: Hot In-Place Recycling

Update section 327 to current industry standards. Jeff Benedict said the re-colored highlights better showed the revisions to section 327. Jim Badowich asked if specifying the depth was a design issue or not. Bob Erdman of Cutler Repaving said the depths describe the typical process used, where about one inch of material is recycled, and the additional materials in the mix typically added, result in up to two inches of pavement. A reference to section 717 was added to allow rubberized asphalt mixes. There was discussion on where this process was applicable. Since many residential streets have 2” or less of asphalt, this process would not be recommended. Recycling larger thicknesses uses a different method. The designer should determine if and when this process is used. Bob Herz asked about testing. Mr. Erdman said density testing is done but coring typically wasn’t. He also said that the process allows the use of larger aggregates since there is an inch of soft material underneath that they can settle into. A couple minor corrections noted were to change ‘or’ to ‘of’ in the first paragraph and delete the word ‘used’ in the last sentence to be consistent. Mr. Benedict said he would make the changes.

13. Case 11-08 – Revise Section 711: Paving Asphalt

Update performance tables, references to ASTM standards, and revise Section 711 to meet current practices. Jeff Benedict said the new highlighting identified the changes, which were to update the section with current ASTM and AASHTO specifications. He noted a change in the temperature from 100 to 110 degrees Celsius for our region. He also explained that the lower temperature minimums were based making the repeatability of the tests more consistent. Mike Smith asked if the title should be changed to *Asphalt Concrete*. Members agreed that it was a more accurate title, but that any references to *Paving Asphalt* would need to be updated. Mr. Smith agreed to do a search for these and include them in the case.

14. Case 11-09 – Update Preservative Seal for Asphalt Concrete

Revise Sections 334 and add new 718 to meet current industry materials and practice. Jeff Benedict said he made updates to correctly identify the Type A, B and C materials in section 718 and refer to the correct materials in section 334.2. Peter Kandarlis said he would provide comments for the next meeting. Bob Herz asked what the accelerated weathering test was. Mr. Benedict said it was a \$3000 test to show the materials passes X number of hours of UV resistance. Mr. Herz suggested information about the test be added as a footnote. Members also discussed application of preservative seal with a squeegee. Mr. Benedict responded that it was a different process that used more sealant and wasn’t appropriate for this specification.

15. Case 11-10 – Curb Ramp Modification for Radial Installations

Add new detail 234 and modify existing ramp details to show curb modification. Bob Herz said there had been no changes and asked for comments. A question was raised about having the domes aligned with the direction of travel. Mr. Herz said that the ramps may need to be aligned to the direction of travel (depending on a judgment of the DOJ), but the domes were not affected because they are aligned with the ramp. Mr. Badowich asked if a new detail was necessary. Mr. Herz explained that it was difficult to add all the information to each ramp detail, so instead they would just reference the new detail. He said that he would be updating the other ramp details to refer to it as necessary, and that he provided these updates to a drafter at MCDOT.

16. Case 11-11 – ASTM Revisions

- a. **Case 11-11A – Nuclear Density Testing of Soil.** Peter Kandaris said no changes have been made to this case, and he didn't have an opportunity to add any more ASTM revisions at this time. Feedback and other ASTM corrections were requested.

17. Case 11-12 – Modifications to Regulatory Requirements, MAG 107

Add references to Arizona native plant requirements update references to state statutes. Mr. Kandaris asked for feedback on this case, stating a new standard was needed since ARS 23-373 no longer exists. Members questioned why MAG pulled out a handful of ARS references when all state statutes must be followed. Others suggested having them helps provide guidance for people in the field. Mr. Kandaris asked if the agencies could have their legal departments review this case. Jeff Hearne said he tried to search the web to see how the old law was changed, but was unable to find it. Members asked if a legal review of section 107 could be done by MAG. Mr. Tyus said he would look into it.

2011 New Cases

18. Case 11-13 – Replace Current Manhole Frame and Cover Details

Replace Details 423, 424, 523-1 and 523-2 with new details of products that are currently being manufactured. Scott Zipprich introduced a new case to replace the current MAG details for 24" and 30" manhole frames and covers (for the regular, water tight, and pressure tight applications) with new details 423-1, 423-2, 424-1, 424-2, 523-1 and 523-2. The Water/Sewer working group determined that new details are necessary to match that type of castings currently being made. Mr. Zipprich said Rita Chihanik of Deeter/Neenah helped provide new drawings. They removed much of the detail of the previous MAG drawings so manufacturers are allowed to design the frames and covers as needed in a way that meets ASTM requirements and AASHTO standards for load bearing. Other updates included adding the name of the manufacturer and model number on both frames and covers so that they can properly be matched if a cover is stolen, or during repaving projects.

In addition, Mr. Zipprich discussed other related and possibly upcoming revisions. These included modifying section 787 to match the new details, and updating 391 valve box details to allow a heavier-style lid (as currently used in Yuma and Phoenix). He also noted that MAG does not have anything for reclaimed water boxes. A brief discussion ensued about the pros and cons of round and square boxes, colors, and other reclaimed water-related topics. Finally he also mentioned that the Water/Sewer group was planning to introduce a separate adjustment detail for raising and lowering frames and covers.

19. Potential Cases

Bob Herz said he was reviewing the storm drain *Detail 520*. Currently it shows a centerline alignment, but ideally the crowns should match. There was some discussion about the limits of matching crowns on flat development, and how it could affect limits on matching depth. Several members said they should be designed by inverts, and that the centerline is not always the best option. It was suggested that instead of showing it on the centerline or by matching crowns it should just call out the invert design per the plans.

Mr. Tyus said he received an email from Syd Anderson stating that he was planning to put together a case revising the concrete pipe standard.

Mr. Tobiasson noted that a handout provided by Stronggo via the outside ROW working group had information and draft changes to the detectable warning specifications. Peter Kandarlis said that the handout was provided to give some background on this topic, and that the working group was planning to make some revisions for a possible future case.

20. Working Group Reports

a. **Specifications and Details Outside the Right-of-Way Working Group (5/25/11)**

Peter Kandarlis said the group is working on several draft cases for areas of the MAG document not covered by the other working groups. *Section 350 Removing Existing Improvements* is in rough draft format, and will add information on utilities. He hopes to revise it and propose it as a case during the July meeting. Other potential cases included the detectable warning specification previously mentioned, and guard rail standards. Mr. Kandarlis said the existing guard rail details are out of date and should be removed. He reviewed the county supplement and the ADOT details they were based on, and suggested that he work with Maricopa County to incorporate their supplement into MAG. Bob Herz said he would be happy to help. Mr. Kandarlis said there were many different end details of traffic terminals that could be left to the jurisdiction to specify.

He asked if anyone was using *Detail 204 Equipment Crossing*, and if not perhaps it should be added to the deletions case. Mr. Kandarlis also noted the alley details (202) should be updated either by removing the unpaved alley option or adding information about dust abatement. He also asked about the use of inverted crowns, and whether the detail should be renamed as Access Roads. Another potential case under review was to

consolidate all of the street sign base details, since most were very similar. Finally it was discussed that the speed hump striping needed to be revised.

The remaining sections the group was reviewing, such as fencing, painting and landscaping, needed people with expertise in these areas. Members were asked if they could identify experts at their agency. Peter Kandaris said the group would try to have three or four cases ready to submit at the July meeting. The next meeting of the outside right-of-way working group is scheduled for June 29th at 1:30 p.m. at the ARPA offices.

b. Asphalt Working Group (5/13/11)

Jeff Benedict provided notes from the May meeting. In addition to the discussions with John Shi noted earlier, the working group is preparing RAP specifications. Whether payment for RAP should be specified differently was discussed. Brian Gallimore believed that if it is a MAG approved mix, there shouldn't be a difference in payment just because you are using recycled materials. Mr. Benedict described methods of recycling on site (such as Mesa has done) or off site, and how the amount of work done was similar. Bob Herz said they paid per ton of material based on a volume calculation. Mr. Benedict said he also expected minor revisions to section 321 and was planning to incorporate county revisions. The next meeting is scheduled for June 17th at 7:30 a.m. at the Speedy and Associates office.

c. Materials Working Group (5/13/11)

Brian Gallimore said their meeting followed the asphalt meeting. Items discussed by the working group included updating the lime slurry specifications, and possibly adding a materials section for lime. Also there was some discussion about ABC and the PI and R values, although addition work is needed in this area. Several other draft cases are under review. The next meeting is scheduled for June 17th at 8:45 a.m. following the asphalt meeting at the Speedy and Associates office.

d. Water/Sewer Issues Working Group (5/17/11)

Jim Badowich was unable to attend the May working group meeting, so Scott Zipprich filled in for him. Notes from the meeting were provided in the packet. Mr. Zipprich mentioned that in addition to the manhole frames and covers, he was working on new fire hydrant details, but that he needed additional time to revise them. He also said pre-cast manhole bases were discussed, and that he was developing a spec for Buckeye that MAG may want to use in the future. Jami Erickson said Phoenix was investigating precast bases, and a concern they had was making sure the grade was even and compacted so the bases didn't tilt. Peter Kandaris said SRP uses them for electric utilities. Mr. Badowich said the challenges are making the pipe connections work since the tolerances are tight and must work with gravity flow. He suggested adding the precast base an option, not removing the cast in place specifications. Scott Zipprich was asked if Jensen would be available to make a future presentation. He thought that they would, since they have had experience building precast bases in California, specifically in Sacramento, where they are required. The next meeting of the

water/sewer working group is scheduled for June 21st at 1:30 in the MAG Agave Room. (1st floor of the MAG building.)

e. **Concrete Working Group (5/18/11)**

Jeff Hearne said the group made its first pass at several sections identified for review by the concrete working group. He said four to five sections are in draft format, and agency participation is welcome to improve potential cases before they are presented to the full committee for review. One issue he raised was whether agencies wanted to continue to use class B concrete for curbs and sidewalks, or it should it all be specified as class A, which provides better durability. He said the group also received good comments on the riprap specifications and that updates for it were being developed. Mr. Hearne said to get a jump on things, the next concrete working group meeting was scheduled for June 9th at 1:30 p.m. at the ARPA office.

21. Staff Reports

Gordon Tyus said MAG currently is remodeling its second floor meeting rooms, and that the committee would need to find meeting space for the July and August meetings. He said Valley Metro has agreed to host MAG meetings; however, the Lake Mead room is relatively small for our committee, so other places are worth investigating. Tom Wilhite of Tempe and Jeff Hearne of ARPA agreed to check with their organizations to see if they can reserve meeting rooms.

Due to the July 4th holiday, and members' vacation plans for that week, it was suggested to reschedule the July 6th meeting to a week later on July 13th. A majority of members present preferred the later date, and none strongly objected, so it was decided to move July's meeting date to the 13th. Mr. Tyus said he would work with members to find a convenient location and notify every one of the change in date and venue.

NOTE: Since the meeting, ARPA has agreed to host the committee at their location on July 13th, and Tempe has reserved space (if needed) for the August 3rd meeting. Final confirmation of date and location changes will be posted on the MAG website and sent out via e-mail to members and e-list subscribers.

22. Open General Discussion

Mr. Tyus brought up the subject of the past committee practice of making July the last month to introduce new cases for the year. Several members, including working group chairs, expressed a desire to allow new cases to be introduced after the July meeting so the momentum and work being done by the groups would continue. Mr. Tyus said that bylaws stated that cases could only be carried over one year, so that may affect how long new cases have before they must be voted upon. Mr. Tyus also explained that a few months was needed to allow the cases to be reviewed by the public works directors and MAG Regional Council, in addition the time needed to make the changes to the document and details (especially if it is reformatted as a new edition) as well as time for print production. Chairman Tobiasson believed it was important to complete the current cases, and felt additional cases may distract

from finishing and voting on the existing ones. Mr. Tyus asked if the committee wanted to delay the new edition until more cases from the working groups could be incorporated. Mr. Herz recommended that MAG stick to a January release date. Mr. Tobiasson felt that enough changes had been made that a new edition was warranted even if it did not incorporate all the working group cases, especially with the document conversion. One suggestion was to allow working groups to continue to draft new cases, but add them to a cue of potential cases that would automatically be assigned official case numbers in January 2012.

A short discussion about the paint colors used to note utility lines was initiated because some paints seemed have the colors quickly fade, making them difficult to distinguish. Mr. Gallimore suggested fading may be due to the use of water-based paint.

Chairman Tobiasson reiterated his desire to focus on the current cases and try to review and schedule them for a vote as soon as possible. He noted that the meetings are currently lasting until about four o'clock, and that it was important to get some cases off the docket before adding many more in order to keep the meetings a reasonable length. He thanked members for their work and for staying late through the entire meeting.

23. Adjournment:

Chairman Tobiasson adjourned the meeting at 3:55 p.m.