

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

April 8, 2015

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

AGENCY MEMBERS

Jim Badowich, Avondale, Vice Chair	Ryan Nichols, Mesa (proxy)
Craig Sharp, Buckeye	Dan Nissen, Peoria
Warren White, Chandler	Melody Moss, Phoenix (Streets)
Bryce Christo, El Mirage (proxy)	Jami Erickson, Phoenix (Water)
* Wayne Costa, Florence	Rod Ramos, Scottsdale
* Tom Condit, Gilbert	Kristin Tytler, Surprise
Mark Ivanich, Glendale	Tom Wilhite, Tempe, Chair
* Tom Vassallo, 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 (audio)
* Mike Sanders, AZUCA	* Paul R. Nebeker, Independent
Brian Gallimore, AGC	* Jacob Rodriguez, SRP
Greg Groneberg, AGC	

MAG ADMINISTRATIVE STAFF

Gordon Tyus

* Members not attending or represented by proxy.

GUESTS/VISITORS

Ruben Aguilar, El Mirage

1. Call to Order

Chair Tom Wilhite called the meeting to order at 1:30 p.m.

Mr. Wilhite introduced the new member from Phoenix, Melody Moss. Also introduced was Ryan Nichols a proxy for Mesa.

2. Call to the Audience

There was no comment from the audience.

3. Approval of Minutes

The members reviewed the March 4, 2015 meeting minutes. Bob Herz moved to accept the minutes as written. Kristin Tytler seconded the motion. A voice vote of all ayes and no nays was recorded.

Carry Forward 2014 Cases

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

Make revisions to Section 415 and/or include guardrail details in MAG. Mr. Herz said he had no change at this time.

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

Update the specifications preservative seals. Jeff Benedict said the text was massaged a bit at the last Asphalt working group meeting. He said the specification would be revised to make sure it complied with Maricopa County's Section 340 dust rules, and to make sure the ASTM testing procedures are equivalent to AASHTO tests listed in the initial draft. He encouraged members to attend the next working group meeting to provide input.

6. Case 14-12: Proposed Revisions to Sections 336, 321.10.3, 601.2.7 and Detail 200-1.

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 discussed a few areas where he wanted input from the committee. The first was on page 336-3, Item G. The spec currently references Detail 201, but does not specify whether to use the safety edge or not. He said MCDOT uses the safety edge on longitudinal pavement replacement for roadways with posted speed limits of 35 mph or greater. If the speed is less they use the Type B detail. For transverse cuts no safety edge is used unless the cut is greater than 25'. He asked members

if specific requirements should be included in the specification or just to leave it to the jurisdiction as currently shown. The consensus was to leave it to up to the jurisdiction based on the project requirements.

Next Mr. Herz discussed the current spec that reads, “Laying a single course or the base course(s) of the asphalt concrete pavement replacement for trenches shall never be more than 600 feet behind the ABC placement for the pavement replacement.” He noted this is in conflict with Section 601 which has a distance of 1320’. Mr. Herz suggested changing the 600’ to 1320’ to be consistent. Jim Bodowich agreed with the change stating he felt 600’ was too short of a distance for typical construction jobs. Ryan Nichols of Mesa said that although they enforced the 600’ distance on previous jobs, they were not against increasing the distance since they could include an addendum to their specs, or have it as a special provision.

Then Mr. Herz discussed on page 336-4 the reference “Type D trench repair may also be used when the condition of the existing pavement does not justify construction of Type A, Type B or T-Top trench repair.” The Type D trench repair is for non-paved areas. He suggested deleting this sentence. Rod Ramos asked if this section may used to make repairs to other types of surfaces such as unpaved or chip seal roads. Peter Kandarlis said he thought it was added originally as an option for an area with bad pavement conditions. The consensus of the committee was to go ahead and delete the Type D reference. Bob Herz said the two following paragraphs were also revised.

Mr. Herz said the final item he needed to work on this case was updating Detail 200-1. Mr. Kandarlis volunteered to help with the drafting changes if Mr. Herz would send him the redlined version. Mr. Herz said he still needed to review the detail, but once he had it redlined he would send it to Mr. Kandarlis for CAD revisions.

7. Case 14-17: Create New Section 322 - Asphalt Stamping.

Provide specifications for materials and methods of Asphalt Stamping. Greg Groneberg said a handout provided at the meeting had the latest updates from the working group that included removing the text “MAG” prior to section references. He said they are looking for comments from the agencies, and are also looking at Scottsdale’s current project request to note any differences.

Bob Herz said the language about contractor qualifications in the general requirements section is typically not used in MAG specs. Mr. Groneberg said currently most of the supplements or project documents do have language on contractor qualifications, but they are looking for feedback, and the case will be discussed at the next working group meeting.

Mr. Herz asked if the type of asphalt should be included. Mr. Badowich wasn’t sure if it needed to be that detailed, but maybe the types of asphalt that this process can be used with should be listed.

Mr. Groneberg explained the current template depths are 3/8" over 99%, but Scottsdale currently specs 95%. He also responded to a question about minimum sizes, stating that they do have standard templates, but they can cut them down for smaller sizes. Medallions were also discussed, and it was thought to have them as separate bid items. Tom Wilhite asked if the bid price should be per square foot. Gregory Arrington said that Youngtown is doing custom stamping at their intersections, and that they are negotiated as a separate complete bid items based on the design. Warren White suggested including standard general patterns. Mr. Wilhite suggested changing the last sentence of 322.5 to simply state, "unless specified by the agency." Jim Badowich thought specialty stamps may need to be measured by the item, and have this clarified in the payment section. Tom Wilhite asked if there was any discussion on the warranty section. Seeing none, Jeff Benedict invited members to attend the next working group meeting to help finalize the case.

New Cases for 2015

8. Case 15-01: Miscellaneous Corrections A-C.

No new corrections were introduced.

9. Case 15-03: Revise Section 601.4.5 Trench Final Backfill.

Change backfill placement requirement from 2 feet maximum lifts to layers not exceeding eight inches in depth under certain conditions. Bob Herz explained the latest changes based on feedback from the Water/Sewer and Asphalt working groups. He said changes to the description of the compaction wheel were made. It removed the reference to "sheepsfoot" to avoid confusion with standalone sheepsfoot compaction equipment. He asked for any comments or suggestions. Seeing none, Mr. Herz asked that the case be placed on the agenda for action at the next meeting.

10. Case 15-04: Revise Section 602 Trenchless Installation of Steel Casing.

Update ASTM references for casing material and add minimum casing wall thickness. Arvid Veidmark said nothing has changed since last month. He asked for comments. Ryan Nichols of Mesa asked if the casing wall thickness table was based on the railroad guidelines. Mr. Veidmark said the railroad guidelines only go up to 40". He said the table was based on the sizes historically used in the region, and that the current Section 602 does not have any minimum case thickness requirements. Jim Badowich said typically engineers specify the thickness of the casing. Mr. Veidmark said he was concerned that without minimum standards, the contractor would have to get the seal of an engineer, and the engineer would need a geotech on the job to determine soil conditions. Jami Erickson asked Mr. Nichols who he thought should determine the case thickness, the design engineer or the contractor. Mr. Nichols replied the design engineer should, but also wondered what would happen if the engineer wanted a thickness smaller than that in the table. Rod Ramos said the engineer can always change the

casing requirements on the plans or through special provisions which would supersede the MAG specs. Jim Badowich added that the table provided a minimum standard, but agencies can always require what they want in the submittal process. Mr. Ramos said they currently have a project using 5/8" thickness for a 48" casing. It was decided no modifications to the case were needed.

Bob Herz moved and Rod Ramos seconded the motion to approve Case 15-04 as presented. A roll call vote was taken. The motion passed: 13 yes, 0 no, 0 abstained, and 4 not present.

11. Case 15-05: Revise Section 616 Reclaimed Water Line Construction and Add New Reclaimed Valve Box Detail.

Revise Section 616.2 Materials to reference appropriate sections and create new detail.

Warren White discussed the additional materials provided at the meeting. First he described a page from the administrative code requiring that reclaimed water lines need to be shown in purple or legibly marked. He said many jurisdictions are using square instead of round boxes for reclaimed water. Craig Sharp said MAG specs require that they be different. The second handout included the current frame and cover Detail 270-1 and on the back a new square version of detail 270-2. He said the new detail is very similar to the one used by Scottsdale. Mr. White asked if the title of the detail should be changed to "Reclaimed" "Nonpotable" or "Square" Frame and Cover. Rod Ramos said they use "Nonpotable." Jim Badowich agreed and provided the example of well water that was not reclaimed, nor potable.

Warren White said Note #2 would need to be updated as appropriate and asked about the size of the letters. He said he is currently looking for vendors of these types of boxes. Mr. White said the riser pipe is round, and the box changes from square to round below the 7/8" lip. Members noted that a line should be shown on the drawing where this transition is made.

Mr. White explained the next part of the case is to revise Detail 391 to create a new Reclaimed Water Valve Box Installation detail. An example was provided in the packet. He said Chandler utility crews have had issues with valve extensions, and also typically don't require debris caps. He said this issue would be discussed further at the next Water/Sewer working group meeting.

12. Case 15-06: Delete or Update Section 744 ABS TRUSS PIPE AND FITTINGS.

Determine if material is still used and if the specification needs revision or should be deleted.

Bob Herz asked if anyone was still using ABS Truss Pipe. Since no one appears to be using it, he suggested deleting Section 744 from MAG entirely. He proposed that the committee vote on this action at the next meeting.

13. Case 15-07: Revisions to Concrete Paver Standards for Non-Traveled Surfaces.

Make revisions to Detail 225 and Section 342. Warren White provided Scottsdale's supplemental Detail 2239 as an example of median concrete pavers not used in traffic areas. He said most agencies have a supplement for the median design. He suggested adding a detail similar to Scottsdale's Type A to MAG Detail 225 (which was included in the packet).

Mr. White asked if the concrete header should remain at 12" as currently shown on the MAG detail, or 6". Mark Ivanich said they typically use them for cross walks, and it is easier to paint an 8" stripe on the 12" header. Tom Wilhite said they use the 12" header without problems.

Another difference in details was that MAG uses 9" thick concrete, whereas Scottsdale uses 8" reinforced concrete. Bob Herz said commercial driveways are also 9". Most members did not see a problem keeping the 9" thickness for traffic areas, but that it may not be needed for the medians or pedestrian areas. Mr. Ramos said Scottsdale does not use pavers for crosswalks. The consensus was to leave 9" non-reinforced concrete as the default. It was noted that the current Detail 225 does have a joint detail. Mr. White asked about the thickness of the sand base. Mr. Ramos said 1" worked perfectly fine.

Tom Wilhite asked what happened when the pavers are cut through during repairs. Arvid Veidmark described a job where this happened. They saved the pavers and replaced them after making repairs to the grade below. Mr. White asked if the 4" ABC below the pavers in the median was sufficient, and if slurry could/should be used. Mr. Ramos said they have not had a problem in the medians using 4" of ABC. Jim Badowich said you need both options (in the roadway and for medians). He also said that Avondale has used the smaller 60 mm pavers in non-traffic areas. He said 60 mm and 80 mm pavers were the common sizes. Mr. Ramos said they typically use only the 80 mm pavers to make it easier.

Bob Herz returned to the thickness of the header stating it made sense to use 12" headers for crosswalks, but 6" headers could be used on flush medians.

Mark Ivanich said Glendale is using the pavers on sidewalks. Bob Herz warned against using this detail for sidewalk construction because the ADA has a maximum allowable change in elevation of 1/4" after which a 2:1 taper is required to avoid a tripping hazard. Mr. Ivanich said they require the HOA to maintain them. Mr. Wilhite said a detail showing the header next to pavers on a private driveway may be useful.

Finally, Warren White asked if asphalt stamping was done on raised medians. Jeff Benedict said it was and asked Rod Ramos if they had a detail. Mr. Benedict said they can look at this at their working group meeting.

14. Case 15-08: Revisions to clarify Table 710-4 to Eliminate Misinterpretation of Criteria 8.

Bob Herz presented a new case to fix the table formatting of 710-4. He said it was being misinterpreted that 3/8" or 1/2" mix are required to be designed for low traffic only and 3/4" mix was for high traffic only. He fixed this problem by pulling out the number of gyrations info and placing it into a separate table 710-4. The existing table 710-4 would be renumbered as 710-5. Rod Ramos asked if there was a better way to specify pavements mixes since MAG has more choices. Mr. Herz said that was beyond the scope of this case, and Jeff Benedict agreed, stating that providing training may be a better option.

Mr. Herz felt this was a pretty simple case and suggested voting on it at the next meeting. Mr. Wilhite thought it would be better to allow the agencies a chance to discuss it next meeting and vote the following month.

15. Working Group Reports

Chair Wilhite asked for reports from the working group chairs.

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

Jim Badowich said the group met Thursday, March 19, 2015 at 1:30 p.m. They spent most of the meeting discussing the new Section 608, Horizontal Directional Drilling. He said the initial draft of the spec was assisted by ASU professors, and was a lot more instructional in nature. Mr. Veidmark said they currently are on Revision 17, which includes many of Bob Herz's comments to make it less instructional and written more like other MAG specifications. He said he has run it by APS and other utilities.

Mr. Ivanich asked if this process was changing so quickly that our specs would also need to be constantly updated. Arvid Veidmark said the overall process wasn't changing that much, just that the industry was finding ways to go deeper and further. The draft spec focuses on the mini and mid-range projects that are typically 500' and under for utilities 6" and smaller. Jim Badowich said it focused more on things such as keeping a minimum distance from other utilities, etc.

Mr. Wilhite asked if it covered other methods such as hoggings. Mr. Veidmark said no, only horizontal directional drilling. He was also asked about distance from distribution lines and transmission mains. He said the draft spec did not address these specifically, but that other agencies and utilities will make specific requirements, and that this could be discussed further at the working group. Jim Badowich commented that the original drafts tried to cover all methods, but it has been scaled back to focus on the small and medium size jobs that make up 90%+ of the projects. He said larger projects will have their own specific design. Mr. Badowich commented that he also attended the last AZUCA meeting where they discussed cross-boring and problems such as gas lines boring through sewer laterals. He said SW Gas is now using video to find problems.

Arvid Veidmark said state statutes require utilities to be potholed at each crossing for the duration of the bore. One time they found 17 utilities and ended up doing an open cut

instead of boring. Peter Kandarlis said design engineers have to look at these issues beforehand to determine whether to bore or open cut. Mr. Veidmark said utilities like to pothole at the time of construction. Peter Kandarlis said SRP showed a cross-section on the plan. Mr. Veidmark said now SRP are submitting without profiles. Tom Wilhite said Tempe requires open cuts through intersections due to all the utilities under their streets. Mr. Veidmark said Slade Ottney is working to create cross-bore legislation. Jim Badowich said they will be looking at providing a case to the committee in a month or two.

He said the rest of the meeting was a quick discussion of Mr. Herz's cases, and potential changes to flushing requirements. The next Water/Sewer meeting is planned for April 16, 2015 at 1:30 p.m. at the MAG office.

b. Asphalt/Materials Working Groups

Jeff Benedict said the group met on Thursday, March 26, 2015 at noon at the ARPA office. He said the notes in the packet summarized what was discussed.

Mr. Benedict said the next meeting is planned for April 23, 2015 at noon at the ARPA office. They plan to discuss asphalt rubber mix design changes, since ADOT and MAG specs are different. The stamped asphalt case will be reviewed as well as potential stamping in medians. Dave Bechel, who discussed his issues with testing lime-treated ABC last month, will be meeting with Mesa next Thursday. Mr. Bechel said he would provide updates on this issue to the working group. Mr. Benedict encouraged members to attend the meeting where lunch will be served.

c. Concrete Working Group

Jeff Hearne said no concrete working group meeting was held last month. He said the group would meet after the other working groups on April 23rd.

d. Outside ROW Working Group

Peter Kandarlis said he had some repairs to his body, and as his health improves he hopes to restart the group.

16. General Discussion

Warren White brought up the issue of locating underground utilities, specifically with tracer wire. He asked other agencies how much it is being used and how effective has it been. He said that his understanding is that Chandler has not had great success in use of tracer wire. He said there was also the problem of bringing the tracer wire to the surface, now that it is outside the valve boxes that has helped. He noted that the wire is not shown on MAG details. Arvid Veidmark said locating ductile iron pipe also only works if you have jumpers between sections. Jim Badowich suggested that another detail may be needed. Craig Sharp said with so much horizontal drilling happening, locating utilities and using tracer wire is critical. He said bluestaking gives a closer depth with tracer wire, and so Buckeye is using the wire and brings the leads up at all hydrants. He thought a case with specs on how to use and connect the wires

would be good. Currently it is one of 11 options available to locate utilities. Arvid Veidmark said you must have a way to positively identify what's in the ground. He added SW Gas uses tracer wire on everything.

Gordon Tyus said he met with representatives from ASTM last month. Also in attendance was a MAG IT specialist. He said they are currently testing MAG's ASTM portal, and that Warren White inadvertently got through using it. Mr. Tyus said he would provide more information on it as it was ready. He said a couple additional items of interest from the meeting included discussion about a tool ASTM was developing that could scan PDF documents (such as the MAG specs) and automatically provide hyperlinks to the specifications on ASTM's Compass website. The Compass website also has added AASHTO specifications, although MAG's subscription currently does not include them.

Bryce Christo introduced El Mirage's new city inspector, Ruben Aguilar. He said Mr. Aguilar would take over as their representative on the committee next month.

17. Future Agenda Items:

None were suggested.

18. Adjournment:

Seeing no further business the meeting was adjourned at 3:31 p.m.