

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

January 5, 2011

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

AGENCY MEMBERS

Jim Badowich, Avondale	Mike Samer, Mesa
Scott Zipprich, Buckeye	Jesse Gonzales, Peoria
Warren White, Chandler	Syd Anderson, Phoenix (St. Trans.)
Dave Emon, El Mirage (proxy)	Jami Erickson, Phoenix (Water)
Greg Crossman, Gilbert (proxy)	Mark Palichuk, Queen Creek
* Tom Kaczmarowski, Glendale	* Rodney Ramos, Scottsdale
Troy Tobiasson, Goodyear, Chairman	Jason Mahkovtz, Surprise
* Shimin Li, Maricopa County (Envir. Div.)	Tom Wilhite, Tempe, Vice Chair
Bob Herz, MCDOT	

ADVISORY MEMBERS

John Ashley, ACA	Jeff Hearne, ARPA
Amanda McGennis, AGC (proxy)	Peter Kandaris, SRP
Tony Braun, NUCA	Paul R. Nebeker, Independent
Bill Davis, NUCA (proxy)	Mike Smith, ARPA
Brian Gallimore, AGC	

MAG ADMINISTRATIVE STAFF

Gordon Tyus

* Members not attending or represented by proxy.

GUESTS/VISITORS

Connie Corder, NUCA
Bob Erdman, Cutler Repaving, Inc.
Dan Hernandez
Jerre Mills, Sunbelts
Niranjan Vescio, Stronggo

1. Call to Order

Chairman Troy Tobaisson called the meeting to order at 1:28 p.m.

Mr. Tobaisson presented past chair Jesse Gonzales with a certificate of appreciation for his service as chair during 2010.

Future new committee members Dave Emon from El Mirage and Greg Crossman from Gilbert introduced themselves.

2. Approval of Minutes

The members reviewed the October 6, 2010 meeting minutes. Jesse Gonzales 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.

3. 2010 Cases (continuing cases)

a. Case 10-05 – Revise FOREWORD: *Clarify use of the MAG Specifications and Details for Public Works document.* Jesse Gonzales said that no changes were made since the last meeting. He did mention that he received comments and may wish to add text that clarify that the use of the MAG specs, that are designed for Maricopa County, may need to be adjusted for other parts of the state. He gave an example of the research he did on reclaimed water specifications where the PAG and CAAG regions refer to the MAG specifications. John Ashley suggested that we may want the Foreword, and any disclaimers within it, reviewed by an attorney.

b. Case 10-08 – Revise Section 717 Asphalt Rubber. *Revise Section 717 ASPHALT-RUBBER to obtain a uniform specification.* Bob Herz said that no changes were made since the last meeting and asked for comments from the committee.

c. Case 10-12 – New Section 361 – Shallow Depth Fiber Optic Micro-Conduit Installation. *Provide specifications for the installation of underground fiber optic micro-conduit telecommunications facilities within the public right-of-way.* The case sponsor Rod Ramos was not present to provide an update, so the case was opened for comments from the committee. Bob Herz said the county does not like utilities that close to the surface, but the specification may be suitable for use outside of the public right-of-way. Jesse Gonzales said many agencies had bad experiences with shallow depth “cut and stuff” installation used by cable companies in the past.

Guest Dan Hernandez, who represents a company that provides this type of service, explained the process used on projects in Scottsdale and Paradise Valley. He said that the cable is typically placed 10”-12” below grade and that they are able to install about 24,000 feet per day. He said besides quicker installation, it also produced less noise and

dust, which was appreciated by the neighbors. He explained they typically use sawing wheels to cut to a depth of about 11 inches, then they install the cable conduit and backfill it with a 'super' grout.

Peter Kandarlis noted the current case has specifications for a 1-sack sand slurry grout, and that in SRP testing a similar mix was well under the 150 psi compressive strength stated on the handout. Mr. Hernandez said that there were different options for fill, but the 'super' grout they use seals the pavement surface well. He said the same process was being used to repair pavement cracking.

Jim Badowich commented that relocating the utilities due to road reconstruction in the future could add costs, and asked who would pay. Mr. Hernandez said that the utility would be deep enough not to be disturbed during typical milling operations, but that complete reconstruction could require it to be moved. He said in the past, they were able to pull the conduit up and move it out of the way until it could be installed in the reconstructed roadway.

Committee members also questioned him about the location of the cable in the street and of the boxes. Mr. Hernandez said they try to stay at least two feet from the curb (unlike how it is shown in the case detail). Since the process is designed to work in asphalt, they try to avoid installation next to concrete construction such as curbs. He also explained that the distance between boxes was typically 800-1500 feet, and the vaults typically were located out of the roadway and ranged from 24" to 36" in size.

Jesse Gonzales said a typical application of this type of cable installation was to allow telephone cell towers to be closer together and at a shorter height, so they would be less conspicuous in neighborhoods.

2011 Cases (new cases)

d. Case 11-01A – Miscellaneous Corrections: *Correct the formula in Table 711-1.* Bob Herz introduced this case to correct the formula for the dynamic shear parameter for aged binder (PAV method). In Table 711-1, column 1, row 11, the requirement description is to read:

Dynamic Shear TP5
 $G^* \cdot \sin \delta$, Max., 5000 kPa
Test Temp. @ 10 rad/s, °C

e. Case 11-02 – Safety Edge Detail: *Add an Asphalt Pavement Safety Edge option to Detail 201.* Bob Herz introduced this case to provide another option for the construction of roadway edges. This method reduces an over-correction problem people have when trying to get back onto the roadway after driving on the shoulder. Jesse Gonzales said that he reviewed a couple studies on this issue and provided the following links to them as references.

<http://www.fhwa.dot.gov/publications/publicroads/07sep/01.cfm>
http://safety.fhwa.dot.gov/roadway_dept/pavement/safedge/sses/

Amanda McGinnis said that on the FHWA Everyday Counts website, the safety edge is one of the initiatives they are pushing for, and she commended the sponsor for introducing it as a MAG case.

Brian Gallimore cautioned that this type of construction does not provide a lot of compaction on the edge of the roadway. After the angle is cut with a shoe it typically is compacted with only a small trailer set to the angle. Mr. Herz said the portion below the roadway pavement level would need to be installed and compaction prior to placement of the asphalt roadway pavement. Mr. Herz will review asphalt compaction requirements to determine what may be reasonable compaction requirement for the safety edge. The safety edge will provide the same edge protection that Types A and B of Detail 201 provide. Mr. Gallimore said the title of the detail may need to change because the roadway edge and pavement termination were different. Mr. Herz agreed with modifying the detail title.

Jesse Gonzales said that using this edge could help with risk management. Bob Herz said the county currently has a lawsuit in process on this issue. Peter Kandaris added that maintenance may also be easier.

e. Case 11-01B – Miscellaneous Corrections: *Correct Percentage in Table 705-1.* Peter Kandaris introduced an additional Miscellaneous Corrections case to correct a typographic error in Table 705-1. Based on a previous version of the MAG specifications, the percentage by weight passing screen for No. 200 sieve size should be 0-15 (not 38000 as currently shown).

4. General Discussion:

Possible Future Cases

Paul Nebeker suggested a future case regarding cadmium plated bolts. He said that in Section 610.13 MAG calls for the use of cadmium plated bolts for connecting pipe fittings (flanges, couplings, etc.). He said that this is an outdated specification because cadmium bolts are toxic and require special handling. He also said they are more expensive and would drive up costs. More typically they use zinc plated bolts. He said he spoke to a representative from one of the largest bolt manufacturing companies, and suggests MAG update Section 610.13 to specify zinc plated bolts that meet more current ASTM standards. Committee members agreed to pursue this as a future case.

Guest Niranjan Vescio of Stronggo suggested MAG may want to develop standards for detectable warnings. The company he represents supplies different kinds of detectable warning materials including concrete, tile and plastic. Although MAG specifies the use of detectable warnings it has no material or performance based specifications on what types are allowable. Mr. Vescio said that he was willing to work with Jesse Gonzales to develop some specifications to use as guidance. Mr. Gonzales said that he does not like the plastic types

because the UV rays in Arizona harden them which make them susceptible to damage. Bob Herz said the county evaluates each individually and does allow one plastic version, but primarily use concrete types. It was noted that although detectable warnings are no longer required outside the right-of-way, they still are required within it.

Bob Herz said that MAG details 260-263 (alley entrances) are non-compliant with ADA standards because they currently have a cross-slope greater than 2 percent. He said they all need to be revised, possibly similar to those for driveway entrances or deleted. Also the sidewalks on these details, and others need to be revised to show a minimum 5' width.

Jesse Gonzales said that the directional ramp details that he introduced in prior years have continued to be developed in Peoria and they have begun building and testing them. He said he intends to reintroduce Peoria's new details once they have reached a more finalized state.

Tom Wilhite said the widened Valley Gutter Detail 240 may affect the location and/or rotation of the ramps when the sidewalk is adjacent to the curb. He said Tempe had to make some adjustments in the field. Bob Herz commented that the sliver of concrete in front of detectable warnings at curb returns has a tendency to spall, and Maricopa County is reviewing potential measures to eliminate the spalling and is open to suggestions.

Specifications and Details Outside the Right-of-Way Working Group Update

Peter Kandaris gave a report of the Outside of Right-of-Way Working Group. He said the group finished reviewing the existing MAG specifications and details, and he prepared a draft summary report that outlined the group's findings. It identified if a specification or detail was to be included or omitted, and if included what changes would be needed. For areas that required changes, the outline specified what changes were needed if minor, or identified a group to continue further development for those with major changes. This outline included existing specifications only—not new products or supplements.

He said the working group planned to next meet on Tuesday, January 25, 2011 at 1:30 in the ARPA office. Goals for 2011 are to develop and revise the specifications in the outline and to begin to incorporate other specifications and details for use outside the right-of-way from industry and agency supplements. Scott Zipprich said that many city supplements are for areas outside the right-of-way, and could be easily be incorporated. Mr. Kandaris said he understood there was a lot of work to do, and a large commitment was needed to write and update specifications, but hoped to have a draft document ready in 2012.

Mike Smith of ARPA volunteered to help and would attend the working group meetings. Peter Kandaris said ASU also wants to participate. He also suggested that ARPA, AGC, working groups and industry technical committees could also assist. Warren White of Chandler said he was working on details 321 and 345-1.

In addition to the outline, the group developed a list of current MAG specifications and details that needed to be revised. Some were outdated or archaic, and could likely be deleted; others needed minor modifications, while others required more thorough review. Peter Kandaris presented the committee with a list of MAG specifications and details that needed

revisions with a recommended action for each. These lists along with the outline described previously have been posted on the MAG website.

<http://www.azmag.gov/Events/Event.asp?CMSID=3684>

Some out-of-date specifications and details mentioned included traffic control specs that are rarely used and details not used in the right-of-way such as the Runway or Taxiway Lighting Detail 170.

Possible Future Cases (continued)

Chairman Tobiasson asked members how they would like to divvy up these cases since there were so many identified. Jim Badowich suggested that some cases may be identified to be worked on by various working groups. Another suggestion was to lump all the deletion type of cases into one large case to knock several out at once. Gordon Tyus mentioned that many of the ASTM references are also out-of-date and need to be reviewed to reference a newer standard or be deleted. Jeff Hearne suggested that committee members take the lists back to their agencies and review which areas they may have already created supplements, or know they want to work on, and come back willing to volunteer to take on cases.

Jesse Gonzales said he forwarded the information on Section 616 Reclaimed Water to the Maricopa County Environmental Division for additional work. He also had questions about the inappropriate use of Detail 420 for connection to a live sewer. Finally he mentioned that he is planning to host a presentation on one-pass pavement rehab.

Guest Bob Erdman introduced himself as a representative of Cutler Repaving, but also said that he was retired from the county, and had participated on the MAG specs and details committee in past years before Bob Herz was appointed. He said he was willing to volunteer to help with the working groups. Members said the meetings are open to the public and posted online, and they welcomed his participation.

MAG Specifications and Details Update Packets

Gordon Tyus passed out the 2011 update packet to members. The 2011 version of the *MAG Uniform Standard Specifications and Details for Public Works Construction*, as well as the updates packets, are now available for sale and posted on the MAG website:

http://www.azmag.gov/communications/Specs_and_Details/default.asp

5. Adjournment:

Chairman Tobiasson first thanked Tom Wilhite for agreeing to serve as vice chair of the committee and then adjourned the meeting at 3:05 p.m.