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

February 2, 2011

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

AGENCY MEMBERS

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

ADVISORY MEMBERS

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

MAG ADMINISTRATIVE STAFF

Gordon Tyus

* Members not attending or represented by proxy.

GUESTS/VISITORS

Arturo Chavarria, Hanson Pipe
Jimmy Freeman, Industrial Threaded Products
Wally Gross, Industrial Threaded Products
Dan Hernandez, Quanta Services
Matt Johnson, Synergistic
Michael Hook, American Concrete Pipe Association
Jerre Mills, Sunbelts Asphalt

1. Call to Order

Chairman Troy Tobiasson called the meeting to order at 1:30 p.m.

2. Call to the Audience

Mr. Tobiasson asked audience members to introduce themselves and gave members of the public up to three minutes to address the committee.

Matt Johnson introduced himself, gave some background of his work history in the industry, and briefly explained a software database system he was developing. The system would allow users to quickly find MAG specifications and details as well as link to agency supplements. He said this service was designed to help contractors. He also volunteered to give demonstrations to members and allow agencies to try the software and give feedback for its development.

Wally Gross of Industrial Threaded Products introduced himself and described problems with Section 610.13, regarding the requirement to use cadmium plating on bolts. He explained the specification was out of date, and that zinc plating had replaced cadmium in most applications because cadmium is toxic and a more expensive material. He explained zinc plating had the same corrosion resistance and was specified in ASTM-B633. Jesse Gonzales mentioned that he has a paper from OSHA he can share on the hazardous properties of cadmium. Mr. Gross volunteered to present to the committee for their consideration, information and draft revisions that he prepared. Mr. Gonzales agreed review the materials and sponsor a case to update Section 610.13.

Jerre Mills introduced himself and described a hot-in-place asphalt recycling process to repair utility cuts and make patches. He described a process using radiant heat that could penetrate 3”-4” of the pavement surface, and a type of emulsion that would seal it to make a contiguous patch. He said that Phoenix and Peoria have used this process in the past.

Other guests that introduced themselves were Jimmy Freeman, Dan Hernandez, and Mike Hook.

3. Approval of Minutes

The members reviewed the January 5, 2011 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.

Review of 2010 and 2011 Cases

4. 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 says he has a few more changes he would like to make and submit at a future meeting.

5. 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. He said he needed to coordinate both internally and with external agencies to make additional revisions. Mike Samer said that Mesa had reviewed the section and was okay with most of it, although he did have some questions, including why the percentage of ground rubber was a maximum of 22 percent rather than 25 percent. Mr. Herz said MCDOT had some changes to their supplement of Section 717 that he wanted to update and review it internally, as well as incorporate information from Phoenix.

6. 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, apologized for not being present at the last meeting, but said he did appreciate the comments provided by Dan Hernandez in his absence. He said Scottsdale wants to do a demo repairing cracks in various types of streets. Mr. Hernandez said his company has gone to two separate locations and plans to follow-up with Scottsdale staff to schedule the demonstrations. He also said the written materials he provided *(see case packet)* included updated specifications and details, which also addressed the issue of using a special grout rather than sand slurry.

   Mr. Ramos had nothing new at this time but was looking forward to testing the process for crack sealing applications. He also mentioned Scottsdale was testing a coating to counteract the heat island effect, and using it for crack repair as well. He went on to explain that this case raises two major policy issues. One is the issue regarding the shallow burial of conduit which is in conflict with the current specifications. Another is how to repair the conduit if it is cut, and who would be responsible for the repair. There was also some discussion about where the conduit would be located—if it was as located as shown in the detail, one foot from the curb, or down the center of the street

   Mr. Gonzales asked Mr. Hernandez if the use of the micro-conduit was being pushed due to location of cell towers and related issues. He responded that telecommunications companies want to use this process to install new fiber, especially in more isolated areas, or rocky areas where it is difficult to dig. He also said it was used by Caltrans for Intelligent Transportation Systems (ITS) projects.

Warren White asked how it is allowed in the right-of-way. Dan Hernandez said they get permits from the agency and permission of owners when outside the ROW. Scott Zipprich noted that this specification would not replace the trench specifications, and should be an option only in special situations. He also brought up franchise issues for companies with existing fiber in the right-of-way. Tom Kaczmarowski mentioned contract and licensing agreements would need to be considered as well.

Mr. Ramos said the companies initially wanted to use this process everywhere. He said Scottsdale has used it with shared fiber for an ITS project. Scottsdale also approved a recent project because it was used on a private road in a rocky area. Members discussed several issues including what expectations there would be if the fiber was sold, if it was broken during road work, how it was repaired, where the boxes would be, the distances between cable pulls, and other specific issues. Mr. Hernandez explained the fiber is blown in rather than pulled, can go up to 5,000 feet, and the boxes are moved into curb area.

Jim Badowich suggested that if this process was allowed, it may become the norm. Mr. Ramos said the intent was to create a specification and detail that could be used for special circumstances. This process was tested in Canada is used extensively in Europe. He explained this may be an alternative where you can't dig and boring is too difficult.

John Ashley said the conduit should be placed beneath the paving surface because the expansion and contraction of the pavement could force it to the surface. Mr. Ashley also commented on the need for a crack sealing specification for applications in addition to the process used to seal the micro-conduit. Members agreed that a general crack sealing specification is needed. There were also questions on whether the shallow depth of the fiber was allowed under the National Electric Code. Peter Kandaris said the code did allow exceptions depending upon materials and surfaces.

Tom Wilhite asked about traffic control—what was needed, how long in use, etc. Mr. Hernandez explained that during installation typically one lane of traffic was closed, but that it required no plates, produced less dust, didn't use water, and typically could be completed in a day and reopened to traffic.

Mr. Ramos said he was looking forward to testing the suitability of the process for sealing cracks in different materials, and that he would report results back to the committee.

7. <u>Case 11-01: Miscellaneous Corrections</u>

   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. No new correction cases were introduced.

8. Case 11-02 – Safety Edge Detail

Add an Asphalt Pavement Safety Edge option to Detail 201. Bob Herz said there were no changes this month, but he intends to incorporate updates in the future. Jeff Benedict discussed the difficulty of getting good compaction on the sloped safety edge, and how the rollers could push asphalt to the edge. Mr. Herz questioned how much compaction was required, and suggested using two paving layers – making the second layer a little shorter. There were questions on its use on roads without shoulders. Mr. Herz explained that the safety edge is promoted by the FHWA because it makes it easier for drivers to get back onto the pavement without overcorrecting. He referenced links to materials on the FHWA website for more information. He said MCDOT had lawsuits in the past relating to this issue, and the safety edge could help from a standpoint of public safety. Mr. Herz said he wanted to make updates concerning the edge compaction requirements, address edge erosion issues, as well as update the title of the detail.

9. Proposed New Cases:

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*. Jesse Gonzales agreed to sponsor this case. He said he would scan and distribute the information presented earlier by Wally Gross of Industrial Threaded Products for further discussion by the committee. Jami Ericson said she wanted to make sure the zinc plating was comparable, and also proposed the use of stainless steel plated bolts. It was noted that stainless steel can "weld" itself together. Paul Nebeker said unless the job was recently completed any maintenance would require that the effected section be cut out and replaced rather than disassembled.

10. Possible Future Cases

Tom Wilhite suggested changes to the pothole detail to specify something to seal the overcut. As previously mentioned, he said MAG needs a crack fill specification, with applicable material specifications for various crack fill methods. Peter Kandaris said SRP has a crack fill specification as a Section 337. He also suggested this may be something the Asphalt Working Group may want to review.

Peter Kandaris said the review process conducted by the Outside the Right-of-Way Working Group had identified a list of possible cases for MAG specifications and details that needed to be updated. The handouts divided the list of possible cases to those that could be deleted, those assigned to various working groups for further study, and miscellaneous issues that would require individual members and the main committee to address.

One suggestion was to provide all the potential deletions together in one case with the rationale on why it should be removed. Members could then comment on any specifications or details they use and feel should be kept, and if so what updates would need to be made to

them. It was also clarified that some of the deletions from the MAG specs were actually just moving it to the Outside ROW book. Some members described how the safety curb was used in older parts of downtown areas, and should remain as an option in the MAG book.

Chair Tobiasson assigned these potential cases to be reviewed by the working groups as noted in the agenda item below.

11. Working Group Reports

a. **Water/Sewer Issues Working Group**
Chair Tobiasson asked Jim Badowich to provide an update to the Water/Sewer Issues Working Group. Mr. Badowich said that he would need to change the day of the week of the meeting from Tuesday to more likely a Wednesday. He asked if a meeting room was available at MAG. Mr. Tyus responded that usually a room is available for small groups and he would work with him to schedule a time and meeting place, as well provide a list of past attendees. Mr. Badowich said the group could help prioritize the list and begin working on the highest priorities of the cases identified by the Outside ROW Working Group.

b. **Concrete Working Group**
Mr. Tobiasson said Jeff Herne was unable to attend today's meeting, but that the Concrete Working Group could also begin meeting again. Michael Smith agreed to help. Jesse Gonzales mentioned pervious concrete as a potential topic.

c. **Asphalt Working Group**
Mr. Tobiasson asked Jeff Benedict if he would be willing to lead the Asphalt Working Group again. He agreed and said he would be working with other AGC members.

d. **Materials Working Group**
Brian Gallimore said AGC has technical committees that are already working on some of these issues, and that they often invite agency members to participate. Mr. Tobiasson suggested they review items listed under the "Materials Working Group" section of the handout Mr. Kandaris provided, and asked Mr. Gallimore to head this new working group.

e. **Specifications and Details Agency Supplement Inventory Working Group**
John Ashley noticed that many of the potential cases and supplements that were brought up have also been previously identified by the agency supplement study and working group. He said he still had a list he could present based on the group's previous work. Warren White said Chandler is moving to reduce their list of supplements, and have a goal and process to do so during their normal review. Members asked for him to share Chandler's process so that other agencies could reduce supplements and avoid new ones whenever possible. Scott Zipprich said the process of reviewing these cases can help eliminate supplements by making minor changes when needed, and many of the agency supplements may be appropriate to be included in Outside Right-of-Way document.

f. **Specifications and Details Outside the Right-of-Way Working Group**
Peter Kandaris reported that at the January 25 meeting, the group helped indentify how the potential MAG cases could be presented to the committee. This was shown on the *Case Actions Recommended* handout provided. The committee suggested pros and cons on possible ways of publishing the outside ROW specs including making it a supplement, as a separate complete book or some combination. Mr. Kandaris said the next meeting would be Tuesday, February 22 at the ARPA office. The plan will be to start modifying the identified sections and details to make them appropriate for on-site construction.

12. Staff Reports

Gordon Tyus said the packet included a usage report on agency access to the ASTM website. He also said there were about 65 super-users signed up. He asked the members to continue to promote the use of the ASTM site within their agencies and with colleagues at other MAG agencies not represented on the committee. Mr. Tyus said MAG currently has this project in the next fiscal year budget, but that he would like to show that it is used by agencies to justify funding in future years.

Mr. Tyus also noted that materials for two additional potential cases were included in the packet. One was a list of ASTM standards MAG references that are no longer in use. They need to be researched to see if the new ASTM standard is appropriate, the old one simply deleted or if another specification is required.

The second issue was regarding a new law recently passed by congress that reduces the lead content in piping materials used for drinking water. The requirements will begin 36 months after the law was signed. A vendor provided Mr. Tyus information about brass fittings and other fixtures that will meet the new standard. He also described problems in California, where they have already implemented the stricter standard, but ended up with inventories that would not be used due to slow implementation. Mr. Tyus said some specifications in MAG should be updated to ensure compliance with the new law. These include Sections 631, 754 and 755 which currently reference brand names rather than performance specifications.

13. Open General Discussion

Peter Kandaris described a project by SRP using a thermal backfill material where they modified the ½ sack CLSM mix to include more fly ash. He said the mix was very successful in increasing the thermal properties 50% while the strength remained mostly unaffected. He said Gilbert will be testing it for excavatability. He said he would provide a handout on it for distribution to members.

Mr. Kandaris said he would prepare the deletions case for the next meeting.

14. Adjournment:

Chairman Tobiasson adjourned the meeting at 3:26 p.m.