

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

February 5, 2014

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

AGENCY MEMBERS

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

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

Arturo Chavarria, Hanson  
Stew Waller, Rinker

1. Call to Order

Chair Tom Wilhite called the meeting to order at 1:30 p.m. He introduced two new members from the Arizona Utility Contractors Association (AZUCA): Arvid Veidmark and Mike Sanders. AZUCA changed their name from NUCA of Arizona since they are no longer affiliated with the national organization. Mr. Veidmark introduced himself and said he was looking forward to working with the group.

2. Call to the Audience

Chair Wilhite opened the call to the audience. Stew Waller of Rinker Materials introduced himself.

3. Approval of Minutes

The members reviewed the January 8, 2014 meeting minutes. Rod Ramos introduced a motion to accept the minutes as written. Bob Draper 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 603, 615 and 618 for Flexible Pipe.

*Update pipe installation requirements to allow for flexible pipe types.* Warren White said that updated draft versions of Section 601 and Section 603 were posted on the MAG website to allow those interested to review and provide comments. Mr. Tyus said they can be downloaded from the website on the next Water/Sewer working group meeting page, or today's meeting page: <http://www.azmag.gov/Events/Event.asp?CMSID=5594>

The revisions included comments from a lengthy discussion during the last working group meeting. Mr. White said he will make additional revisions, review them at the next water/sewer meeting, with plans to bring an updated packet to the committee.

5. Case 13-21: Create a new Section 742 Pre Cast Manhole Bases. Add detail drawings for construction and installation and  
Case 13-22: Update Sections 625 and 775 to remove references to the use of bricks in manholes and remove references to manhole steps.

*Update specifications and details for pre-cast manhole bases and other corrections.* Craig Sharp said he provided updated specifications for both Case 13-21 and 13-22 which have been posted on the MAG website for review here: <http://www.azmag.gov/Events/Event.asp?CMSID=5594>

He said he is still updating the current manhole details based on input from the last working group meeting.

## **New Cases for 2014**

### **6. Case 14-01: Miscellaneous Corrections.**

- A. *Change "transverse" to "longitudinal" in Section 321.8.2.*
- B. No new corrections cases were introduced

### **7. Case 14-02: Revisions to Section 405 Monuments and Detail 120.**

*Update specifications to match current details and requirements.* Bob Herz said the updated case in the packet included the addition of revisions to Detail 120 SURVEY MARKER. Due to a request from the county surveyors, a note was added to the Type 'B' marker so that its location is placed 6" below grade for unpaved streets and alleys. Mr. Herz asked if any agencies used the precast monuments mentioned in the first paragraph of Section 405.3. If not, he suggested the reference be removed. He also wanted to know if anyone was using the Type "C" monument on Detail 120. He thought that last year there was some interest in keeping it on the detail, but if no agencies are using it, it could also be removed. Mr. Herz asked members to review the case and provide him feedback.

### **8. Case 14-03: Updates to Guardrail Details.**

*Make revisions to Section 415 and/or include guardrail details in MAG.* Bob Herz said Maricopa County will change to the 31" high (instead of 28") guardrails beginning in 2015. They are based on the Midwest Guardrail System. He said current details will be maintained for reference when repairing/replacing existing guardrails; however, they will include a note specifying that they are not to be used for new installations, only for repairs. He asked members to review the case and provide him comments.

### **9. Case 14-04: Revision to Detail 552 Concrete Cut-off Walls.**

*Move cut-off walls away from roadway edge and delete design related notes.* Bob Herz said the case was handed out at the last meeting and asked if there were any comments. Jim Badowich asked about the purpose of the depth gage. Mr. Herz said it was used to measure water flowing across the ford. Rod Ramos suggested that since the drawing showed more than just the cut-off walls, that it be re-titled to something more descriptive such as FORD CROSSING WITH CUT-OFF WALLS. Peter Kandarlis commented on the use of the term "fine aggregate" near the weep holes, since that means sand, which could clog the holes. He suggested using a filter-fabric and pea gravel, and said he could look up relevant specs.

Rod Ramos suggested showing some indication of the grade on each side, with a note stating GRADE PER PLAN or similar. Tom Wilhite asked if straps should be added for longer drop-offs. Mr. Herz felt they were not necessary, but could be added per the engineer's design.

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 summarized a new case submitted from the Concrete Working Group to update Section 324. He felt it was ready to bring forward to the committee for discussion. He said the case was also posted on the website where it could be viewed in color.

One of the major changes was elimination of the testing for flexible strength and use compressive strengths instead. He said there was a conversion handout at the end of the case that showed that a compressive strength of 3000 psi was equivalent to the 520 psi modulus of rupture and that 650 psi converted to about 4600 psi compressive strength. Based on this, he suggested MAG AA 4000 psi strength concrete would be a good default to use. He said this is also similar to the ADOT Class P 4000 psi concrete. In addition to this change, the language has been updated and modernized, and some areas have been moved around to make it flow more logically, such as moving the equipment specs to the compaction subsection. Mr. Hearne asked for members to review the case and provide guidance.

Jim Badowich asked if it addressed manhole and utility adjustments (Detail 422) since they are done differently than in asphalt. Suggestions included modifying or creating new details. Bob Draper said usually adjustments were addressed in the plans, but the section may want to refer to them rather than MAG's existing details. This seemed to be the best solution rather than modifying or creating new details. Mr. Hearne said he could add language to address the issue.

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

*Update the specifications for the Type C preservative seal.* Jeff Benedict introduced a case from the Asphalt Working Group to update the specifications of the Type C preservative seal to match the material currently being supplied by the manufacturer. He said the revised specifications match that of TRSS (Masterseal) that is used in the Valley. He also said that Note 3 was fixed to use the correct 1000 hour test. Mr. Benedict asked members to review the case with others at their agencies and provide comments. They would be reviewing it again at the next working group meeting.

12. 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 on January 21<sup>st</sup> and that notes from the meeting were included in the packet. One of the major items was the revisions to Section 601 and 603 previously discussed. Reorganizing the sections based on rigid and flexible pipes has brought up other issues. The working group suggests putting all the testing requirements into a new Section 611 since many tests (such as air pressure, video, and laser) can be used for both sanitary and storm sewers.

Other items discussed included water flushing, which is being worked on by Rob Godwin of Goodyear, and jacking and tunneling and directional boring which is being worked on by Arvid Veidmark.

Mr. Veidmark said the concrete jacking pipe in subsection 618.4 was moved to a new Section 607 that is being updated. He said he is also working on a new Section 608 for directional boring of dry utilities. Peter Kandaris asked if dry utilities should be in Section 600. Jim Badowich said directional boring is used a lot for water lines as well. He said it was becoming popular and cheaper even in new construction. Mr. Herz said he would like these sections to come forward for the committee to review. Mr. Veidmark said he would bring them back to the working group with plans to prepare new cases.

Tom Wilhite asked about the use of pipe bursting. He said Tempe has used this technique. Bob Draper commented on potential for potholes. Mr. Veidmark said he could prepare a presentation on the issue if members were interested.

Mark Ivanich said Glendale allows contractors to use various techniques, but cautioned that the technology changes quickly, so it may be hard to write specifications. Jim Badowich suggested that any new specs be generalized. Paul Nebeker said if there is no trench it is easy to hit utilities when digging if there is no indication they are present. Tom Wilhite asked about the use of tracer wire. Arvid Veidmark said he knows a project in the Midwest where directional boring was used for 24" ductile iron pipe. He commented that SRP policy requires a bore plan, and also described new software that can create a CAD profile based on the located utilities. It was suggested that agencies review their supplements to see if they could be included in MAG.

Mr. Badowich said he would like feedback if there was a better date and time for the meeting. Currently the next meeting is tentatively scheduled for February 18<sup>th</sup> at 1:30 p.m. at the MAG office.

**b. Asphalt/Materials Working Groups**

Jeff Benedict said the group met on January 30<sup>th</sup>, and that a copy of the meeting notes was handed out. One of the items the group discussed was the permit side of projects in Section 321. What is the acceptance criteria on projects that agencies, contractors and developers can all agree upon? He said that rather than having the working group tackle the issue, it may need to be addressed through the AGC and meeting with individual cities.

There was also discussion on the use of warm mix. He suggested that agencies may want to do some test projects with warm mix to determine what specifications are needed to ensure they are successful. Mr. Benedict said ADOT's reporting of results was not very good or useful. Bob Herz suggested modifying the language to allow warm mix as an option would be a start, since it currently is not allowed.

Tom Wilhite asked if MAG needed specs for asphalt pavement stamping. Gilbert and Surprise do it. Bob Draper said Mesa allows it through the special provisions. Mr. Wilhite asked if we should have some basic specs such as the heater temperature. Harvey Estrada via the audio-conference commented that Valley Metro is using this on several intersections and crosswalks. Rod Ramos said Scottsdale also uses it extensively, but said it should only be on new pavement and after it has properly cured. The basic process was described, but there was no consensus that specifications were needed, or if they should be done on a per-project basis. Jim Badowich brought up infrared heaters. Brian Gallimore said patching has been done with them. Peter Kandarlis said there was a test section in Kyrene that used the process. Mr. Wilhite asked about use on rubberized asphalt. Others felt it made no difference, although track out can be a problem.

Jeff Benedict said the next asphalt/materials working group meeting is planned for February 20<sup>th</sup> at the ARPA office at noon.

**c. Concrete Working Group**

The concrete working group followed the Asphalt/Materials working group meeting on January 30<sup>th</sup> and notes from the meeting were provided. Mr. Hearne said that a presentation of penetrating concrete sealers was given and more discussion was planned. In addition the group discussed City of Phoenix revisions to 340 and supplements in general. He suggested bringing them to MAG and they wanted to work with Phoenix to help eliminate supplements such as the extruded curb provisions in Section 725. Other issues included mixing requirements and frequency of testing. They also discussed adding water to concrete at the jobsite, and what to do if you have low strength test cylinders. He said they plan to review Section 725 to clarify language and hopefully bring a case forward in a few months.

Jim Badowich asked if there was interest in having a 6" roll curb. He said Goodyear uses them in subdivisions, when 6" is needed for drainage. Rod Ramos said Scottsdale uses a ramp curb because of the large drop-off in roll curbs, mainly for areas that need fire access.

Tom Wilhite asked about traffic circles and roundabouts, noting Phoenix is using them. He said Tempe also has details for garage entrances based on sight distance. Mr. Herz felt this was more of a design than a construction issue. Peter Kandarlis said there were a lot of city supplements for different driveway types and entrances. Phoenix has an additional manual for them.

Mr. Hearne said the next Concrete working group meeting would follow the Asphalt/Materials group on February 20<sup>th</sup>.

**d. Outside Right-of-Way Working Group**

Peter Kandarlis handed out a listing of suggested outside right-of-way standards. They were divided into SITE EARTHWORK, FACILITY WORK, and MATERIALS. The list was based on the materials and discussion items received to date. He asked members to review the list and let him know what they thought should be included. He included

items from SRP and suggested there were many specifications currently in agency supplements that could be adopted for the outside ROW document. Mr. Kandaris said he would also be relying on other working groups to work on specifications, such as the concrete group reviewing pervious concrete.

Other items brought up included backflow preventers for fire sprinkler systems on buildings, reclaimed water specs, and trash receptacle details. Jami Erickson suggested Mr. Kandaris contact the development services groups at the cities who are more involved with on-site work. Mark Ivanich said there is a cross-connection group that also deals with these issues.

Peter Kandaris said he could modify the list to create a survey to email out to the group to compile their feedback and interest.

### 13. General Discussion

Gordon Tyus noted that at their place was a few updated pages of the 2014 packet that were reprinted due to minor errors found by Mr. Herz. Bob Draper asked if the online versions were correct. Mr. Tyus said, yes, the PDF version on the web was corrected the same day the errors were found, and that these pages were updated after the first set of revision packets that were provided to them at the last meeting were printed.

Rod Ramos asked if other agencies had grate details to prevent theft. Other members said they didn't have a problem. Bob Herz asked about modifying or deleting the specs for asbestos concrete pipe (ACP). He said MCDOT and Phoenix had lawsuits against them, and he wanted to add notices to the specs so it was not used in new construction and that if it was used for repairs, contractors were directed to follow required OSHA requirements. Jim Badowich said the water/sewer group could review the issue and asked for Mr. Herz's help. Mr. Wilhite said MAG had a copy of the greenbook that could also be referenced.

### 14. Adjournment:

Seeing no further business, the chair entertained a motion to adjourn. This was moved by Bob Herz and seconded by Dan Nissen. The motion passed and the meeting was adjourned at 3:02 p.m.