

WACA/WSDOT Meeting

Minutes for Wednesday, June 25, 2008 Meeting

Attendees:

Bruce Chattin, WACA	Rich Henderson, Granite NW	Rich Rietcheck, Boral
David Burg, Ash Grove	Tamson Omps, Glacier NW	Felix, Chandra, Stoneway
Dave Heizenrader, WSDOT	Dick Boss, Cadman	Rob Shogren, Lafarge
Mo Sheikhezadeh, WSDOT	Scott DeLoreto, BASF	Mike Morasch, Stoneway
Kurt Williams, WSDOT		

Location: **WACA's office, Des Moines, WA**

Next WACA Meeting Date:

Wednesday, September 17, 2008, at WSDOT HQ Mats Lab, Main Conf Room, 9:30 AM – 12:00 Noon

Future WACA Meetings Dates:

Thursday, December 11, 2008, at WACA's Office in Des Moines, 9:30 AM – 12:00 Noon

Meeting Minutes are available at: <http://www.wsdot.wa.gov/biz/mats/>

Issue: Performance Specifications for Concrete Mix Designs - Mo Sheikhezadeh Issue:

Develop performance specification parameters for concrete that can be developed into specifications.

06/25/2008 – Mo reviewed the presentation about the development of the concrete performance specification that is being shown within WSDOT and asked the group on feedback for possible changes to the presentation. The group briefly discussed the performance specification and discussed the increase of the nominal maximum aggregate size for deck and approach slab concrete. Kurt noted that additional nominal maximum sizes are going to be added to the combined gradation table in Section 9-03.1(5)B. Mo noted that the next performance specification meeting is on ~~August 6th~~, at WACA's office in Des Moines. [The August 6th date has been canceled and the date of the next performance specification group has not been set yet.]

Action Plan: Need WACA/WSDOT subcommittee group formed to address issue and update group at next meeting – Mo S.

Issue: Degradation for concrete Aggregate/Base Course – Mike Polodna.

06/25/2008 – Kurt noted that he did not have any information on this change and would update the group at the next meeting.

Action Plan: Continue to give updates to WACA at Monthly Meetings. – Mike P.

Issue: Truck Scales – Gary A.

03/06/2008 – Gary A. said he has met with the AGC Admin Team about the proposed update to Section 1-09.2 Weighing Equipment. Current proposal to the AGC Admin Team focused on the following: 1) Scaleman's Daily Report, 2) Tare Weight Requirements, and 3) scale verification checks. Gary noted that 1) the scaleman's report could be eliminated as it is a hold over form, 2) the proposed tare weights be changed from twice daily to once every 60 days, and 3) scale verification checks be reduced from once per day to once per project and the Project Engineer can request a second scale verification check. And if the scale is within limits WSDOT will pay the costs of the Project Engineer requested verification check and the contractor will pay if the scale is out of specification. Cathy N. noted she supported keeping the Scaleman's Daily Report because it is a independent check and the form is needed for audits of the project, but agreed with weighing trucks at less frequency the currently required is reasonable. Cathy noted that the next ACG Admin Team meeting is 2 weeks from now and more information will be available after that meeting.

06/25/2008 – Kurt noted that Gary A was not at the meeting and with Cathy Nicholas with the FHWA gone this issue is on hold until the next meeting.

Action Plan: Update group at next meeting – Gary A.

Issue: Specification: 9-03.9(2) Shoulder Ballast and 9-03.17 Foundation Material Class A and Class B. – Gary Albert

1.) It's called Shoulder Ballast but where is it used? In looking at hundreds of project specification, I [Gary Albert] don't recall seeing Shoulder Ballast spec'd more than 3 times.

2.) Foundation Class A Material has both an 1 1/2" sieve and 1 1/4" sieve requirement (duplication?) and couldn't Shoulder Ballast's gradation work instead? I [Gary Albert] have seen both Class A and B spec'd numerous times but never used as spec'd. When it is needed, we always ask to get a 2 1/2"x 3/4" Railroad Ballast substituted as an alternate or a 2"x 3/4", 2"x 1 1/4" or 4"x 2" substituted.

03/06/2008 – Gary A. reviewed the information proposed at the last meeting an noted that he has only used shoulder ballast once for a WSDOT project around guardrail and in comparing the sieve requirements for shoulder ballast and foundation class A and B asked what is shoulder ballast used for and why does Foundation Class A and B have both the 1 1/2 inch and 1 1/4 inch screens. Gary also recommended the name be changed for shoulder ballast to crushed ballast if the material is kept in the specifications as it is typically not used for shoulder work. Recommendation remains for WSDOT delete either the 1 1/2 inch screen from Class A and 1 1/4 inch screen from Class B or delete the 1 1/4 inch screen from Class A and the 1 1/2 inch screen from Class B. Jim W. to check into what WSDOT uses for Shoulder Ballast and Foundation Class A and B, and then look at proposal to remove sieves and rename shoulder ballast.

Sieve Size	Std Spec 9-03.17 Foundation Class A	Std Spec 9-03.17 Foundation Class B	Std Spec 9-03.9(2) Shoulder-Ballast Permeable Ballast
2-1/2	98-100	95-100	100
2	92-100	75-100	65-100
1-1/2	72-87	30-60	
1-1/4	58-75	0-15	
1			
3/4	27-47	0-5 0-1	40-80
3/8	3-14	--	
U.S. No. 4	0-5 0-1	--	5 max.
U.S. No. 100			0-2
% Fracture			75 min

Jim Walter discussed the issues with Class A, Class B and Shoulder Ballast with a number of people within WSDOT and to the following conclusions and recommendations:

Shoulder Ballast Section 9-03.9(2): Looking at the Bid item summaries it would appear that WSDOT does use a lot of Shoulder Ballast, especially in the NW Region and the Olympic Region. The term shoulder ballast would infer that it would be used on or in the vicinity of the shoulders and Jim W thought that in most instances it is not. This product seems to be used more for a permeable stable material in applications such as under permeable pavements and sidewalks or as backfill behind soldier pile walls, backfill behind lagging, earth wall backfill, etc. Most of the applications that were discussed are for permeable applications. Recommend this section be retitled “Permeable Ballast 9-03.9(2)”.

Foundation Material Class A and B 9-03.17 A review of the Bid Item summaries indicates there is not a lot of this material that is used by WSDOT. The material seems to be used for foundations with water difficulties. Discussions with Jim Cuthbertson of our Geotechnical group agreed with eliminating the 1 1/4” sieve and rather than 0-1 percent passing the #4 or the 3/4 sieves for the Class A and Class B respectively to change the specification to 0-5 percent passing.

Recommended Changes are reflected in the table above.

06/25/2008 – Kurt noted that Jim Walter had proposed the modification shown in the table above for gradations and renaming the shoulder ballast. Kurt asked if the proposed changes were acceptable or if there were concern. If the proposed changes are acceptable they will be moved into the Standard Specifications. The group discussed and agreed with the proposed changes.

Action Plan: Update Standard Specifications, Issue Complete – Kurt W./Mike P./Gary A.

Issue: Acceptance Test for pumped concrete – Bob R.

The air content in concrete changes when the concrete is pumped, and there is variability in how much the air content changes depending on the type of pump and boom configuration.

06/25/2008 – Kurt noted that Bob Rayne’s was absent and this issue would be held over as Bob has requested one more discussion on this issue.

Action Plan: Update Group at Next meeting: Bruce C/Bob R/Mo S

New Issue: Admixtures used in Concrete

Currently the WSDOT Standard Specifications Section 6-02.3(3) Admixtures requires when admixtures from different admixture manufacturers they shall provide evidence to the Engineer that the admixture will be compatible. Are admixtures from different manufacturers regularly used in concrete batches? Is there a concern with incompatibility of admixtures from different manufacturers?

6-02.3(3) Admixtures

Concrete admixtures shall be added to the concrete mix at the time of batching the concrete or in accordance with the manufacturer’s written procedure and as approved by the Engineer. A copy of the manufacturer’s written procedure shall be furnished to the Engineer prior to use of any admixture. Any deviations from the manufacturer’s written procedures shall be submitted to the Engineer for approval. Admixtures shall not be added to the concrete with the modified procedures until the Engineer has approved them in writing.

When the Contractor is proposing to use admixtures from different admixture manufacturers they shall provide evidence to the Engineer that the admixture will be compatible and not adversely effect the air void system of the hardened concrete. Test results complying with ASTM C 457 shall be provided as the evidence to satisfy this requirement. Admixture combinations which have been previously tested and which are in compliance with ASTM C 457 shall be listed in the Qualified Products List (QPL). Proposed combinations not found in the QPL shall meet this requirement. Accelerators shall not be used. Air entrained cement shall not be used to air entrain concrete.

06/25/2008 – Kurt noted that a WSDOT project office had brought up the issue of admixture compatibility on a recent project. Kurt noted the Standard specification requirement for compatibility testing of admixture and asked if there had been any compatibility problems with admixtures on projects before. The group discussed and no compatibility issues were identified. Kurt noted that in the past a letter from the admixture companies was used to address questions on admixture compatibility and unless there are problems WSDOT will continue with this method

Action Plan: Issue Complete

New Issue: Class 4000P Concrete – Nominal Maximum Aggregate Size of ½ inch – Mo S.

Standard Specification Section 6-02.3(2)A requires the nominal maximum size aggregate for Class 4000P to be ½ inch. This requires a AASHTO Grading No.7 per Section 9-03.1(4)C of the Standard Specifications. There have been cases of AASHTO Grading No. 8 being used for class 4000P and WSDOT has been informed that AASHTO Grade No. 7 is not always available. AASHTO Gradations from Section 9-03.1(4)C are shown in Table on next page:

Passing	AASHTO Grading No. 467		AASHTO Grading No. 4		AASHTO Grading No. 57		AASHTO Grading No. 67		AASHTO Grading No. 7		AASHTO Grading No. 8	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
2" square	100	—	100	--	—	—	—	—	—	—	—	—
1½ square	95	100	90	100	100	—	—	—	—	—	—	—
1 square	—	—	20	55	95	100	100	—	—	—	—	—
¾ square	35	70	0	15	—	—	90	100	100	—	—	—
½ square	—	—	--	--	25	60	—	—	90	100	100	—
⅜ square	10	30	0	5	—	—	20	55	40	70	85	100
U.S. No. 4	0	5	--	--	0	10	0	10	0	15	10	30
U.S. No. 8	—	—	--	--	0	5	0	5	0	5	0	10
U.S. No. 16	—	—	--	--	—	—	—	—	—	—	0	5

06/25/2008 – Mo noted that WSDOT is seeing smaller aggregates, Grading No. 8, being submitted for 4000P concrete mixes and the Standard Specifications require AASHTO No. 7. Mo asked if there is a problem with producing AASHTO Grading No. 8. The group discussed and noted AASHTO No. 7 is not produced in many locations. Mo noted that he would update the Standard Specifications to allow AASHTO No. 7.

Action Plan: Update Group at next Meeting – Mo S.

New Issue: AASHTO M-85/ASTM C-150 interground limestone limit of 5% in portland cement: Allen Kramer/Bruce Chatten.

Allen Kramer asked if there have been problems with the acceptance of cement with interground limestone, in particular other agencies, engineers and specifiers sometimes use the WSDOT Standard Specifications in non-WSDOT construction projects.

06/25/2008 – Kurt noted that an issues had been brought up by Allen Kramer concerning acceptance of cement and asked the group is there had been any problems with WSDOT cement acceptance or problems with the limestone addition in cement that is allowed by AASHTO M 85 and ASTM C 150. The group briefly discussed and noted there had Ben no problems with cement acceptance.

Action Plan: Issue Complete

New Issue: Concrete Mix Design Documentation Requirements – Tamson Omps

06/25/2008 – Tamson noted that the documentation requirements for WSDOT concrete mix designs paper intensive and noted that it requires 5 mix designs for on concrete mix due to changes in the cement due to the requirement for a unique mix design for each change in the cement type. The group discussed this issue at length and it was noted that the concrete suppliers want to turn in all the concrete mix designs at the start of a project to avoid having

trucks rejected, the WSDOT Project Engineer Office's are not consistent in the time it takes and the requirements for concrete mix designs from office to office, and questions were raised about why the requirements for each material used in the concrete. Kurt noted that it is in part due to the FHWA funding requirement and Mo added that it ensures WSDOT gets the materials that meet the specification requirements. After further discussion Kurt noted that WSDOT is open to suggested changes to the concrete mix design form and process, and noted that the group will need to work closely with the FHWA to ensure we have their buy off and can still track materials.

Action Item: Continue Discussion at next WACA meeting– Tamson Ompps..