

Construction Industry/NDOT Advisory Committee

Materials Subcommittee

Meeting Minutes, June 30, 2008

Attendees:

Rudy Malfabon, NDOT Dir. Office
Dean Weitzel, NDOT Materials Div.
Rich Buenting, Road & Hwy. Builders
Darin Tedford, NDOT Materials Div.
Reid Kaiser, NDOT Const. Div.
John Elkins, Granite Const.
Kevin Stoehr, Frehner Const. Co., Inc.

Steve Hale, NDOT Const. Div.
David Titzel, NDOT District 2
Larry Sharp, Las Vegas Paving Corp.
Glen Fichardt, Road & Hwy. Builders
Mike Douglas, Q&D
Parviz Noori, NDOT Materials Div.

ABSENT: Robert Terril, Meadow Valley Constructors; Norm Davis, Sierra Nevada Construction; Mitch Englestead, Readymix, Inc.; Mike Robinson, Kleinfelder

I. Overview of Advisory Committee & Subcommittees

Rudy Malfabon explained that NDOT and the Construction Industry have formed an Advisory Committee in order to address various contracting issues and improve our working relationship. This effort is not an AGC or union issue; all contractors, subcontractors and suppliers that perform work on NDOT projects are welcome to assist in this effort. There are five subcommittees: Administration (Craig Holt & Rick Nelson), Materials (Rich Buenting & Dean Weitzel), Structures (Gary Janco & Mary Martini), Roadway (Jim Austin & Gary Selmi) and Safety (Rod Cooper & Kevin Lee). The subcommittees have just started to meet and were tasked with developing a short-list of items to work on and forward recommendations to the Advisory Committee. Communication and partnering are promoted throughout this process.

For the Materials Subcommittee, Rich Buenting is the contractor co-chair. Dean Weitzel is retiring in August 2008, so Rudy Malfabon agreed to be the NDOT co-chair in the interim until Dean's replacement is announced.

II. Subcommittee Membership

Subcommittee members are as indicated above. Richard Buenting and Rudy Malfabon are members of the Advisory Committee also. From time to time, other subject matter experts will be consulted and involved in resolving various topics.

III. Identification of Materials Issues

Rudy relied on the initial list of contractor concerns provided by Richard Buenting. Statewide representation on the topics. In addition, subcommittee members were asked if there were other topics. A summary of the issues was provided and discussed and is briefly reported here:

1. Oil content of dense-graded AC Mix Designs – There is often a discrepancy between private labs and NDOT mix designs (submitted by Frehner Construction Co. and Hunewill Construction Co.): The contractor has a private lab perform a mix design in order to estimate what they will produce from a certain source. After award, NDOT Materials Division’s mix design governs and it can be as much as 1% more asphalt content. Also, private labs perform 75-blow Marshalls and don’t typically have Hveem equipment. It is very expensive for a contractor to increase the oil content to NDOT’s mix design target.
2. Oil content of open-graded AC Mix Designs (submitted by Frehner Construction Co.): There have been more failures with richer open-graded mix designs.
3. Alternative to MC prime coats due to availability/environmental laws (submitted by RHB): Besides the issue with volatile compounds entering the atmosphere when cutbacks are used for prime coat, it is difficult for contractors to get price locked in. Can NDOT consider a non-cutback alternative? Regarding the use of double applications of emulsions in lieu of cutbacks, NDOT has had concerns with the emulsion not penetrating as well and getting picked up by haul truck’s tires. An alternative product was used on another project recently but the MC performed better in terms of penetration into the aggregate base and adhesion with the asphalt layer above it.
4. QC Testing by certified labs and their use to NDOT (submitted by RHB): Is it worthwhile for contractors to hire private certified labs to do informational testing when NDOT relies on NDOT’s test results, not the private labs.
5. MSE source acceptance versus project control tests (submitted by RHB): NDOT used to perform source acceptance to prequalify a source of MSE wall backfill. Currently the project control tests determine the acceptability of the backfill. Once the material is crushed and/or placed, there is little the contractor can do to change resistivity. Could NDOT consider a more stringent source acceptance test

- (higher resistivity value required) or more thorough sampling of the pit for source acceptance testing in lieu of project control tests?
6. Alternative Burner Fuels (ASTM D396) (submitted by RHB): Burners at hot plants are much more efficient due to the need to meet air quality standards. NDOT currently requires propane, diesel or natural gas. Lower quality alternative burner fuels should be allowed, as contamination of the mix should not be a concern due to improved burner efficiency.
 7. Consultant resident engineers comfort level with daily material issues (submitted by Granite Construction Co.): When consultant R.E.'s that do not have prior NDOT experience are used, they are more hesitant to make timely decisions.
 8. Oil content oven repeatability and correlations with private labs (submitted by Granite Construction Co.):
 9. Turnaround time for test results when performing asphalt mix test strips (submitted by Las Vegas Paving Corp.): There can be a lack of timely test results during paving production, resulting in greater risk for the contractor when test results come back as failing.
 10. Job-Mix Formula (submitted by Las Vegas Paving Corp.): There is confusion on who does them. Per NDOT specs, the contractor submits the proposed Job-Mix Formula as soon as the Materials Division mix design is available. The contractor sets the target at the hot plant based on air voids, Hveem stability and in-place density test results. There is also the issue of matching the muffle furnace (number 8 above).
 11. NDOT has a 1-year expiration policy for mix designs. The contractor may have the mix design performed early in the contract and begin paving months later. A mix design could expire during the life of the contract without consideration of recent test results.
 12. Recycled Asphalt (RAP) (submitted by Las Vegas Paving Corp.): Will NDOT consider allowing recycled asphalt in the mix, considering the current push for sustainability and environmental considerations. NDOT's requirements for use of RAP included that it had to come from the project, kept separate from other stockpiles of RAP, it had to be tested, and there were significant processing requirements.
 13. Baghouse Fines Reintroduction and Mix Design Process (submitted by A&K Earthmovers): The mix design process doesn't realistically model what happens in the plant during the production process. Baghouse fines are removed and reintroduced during production. There are specification requirements for reintroduction. Contractors would like NDOT to look at baghouse fines.

14. Hot drop (Drum Mix Plants) (submitted by A&K Earthmovers): When mix designs are produced at different asphalt contents, they may not be as representative as an actual production run. NDOT should consider a hot drop of different oil contents to check air voids and stability to determine the target asphalt content.
15. Materials Sites – Sometimes a pit is included in more than one NDOT contract’s special provisions. The first contractor to mobilize into the pit is authorized to use it, while subsequent contractor(s) are not allowed by the permitting resource agency to operate in that pit at the same time.
16. Section 106 (submitted by Reid Kaiser): The groups determined that this issue will be deferred to the Administration Subcommittee (along with asphalt escalation).
17. Shuttle Buggy Requirement: The FHWA is concerned that NDOT only has one acceptable shuttle buggy manufacturer on the QPL. They have restrictions on sole-sourcing. NDOT is pleased with the uniformity of the mat achieved by using a shuttle buggy. NDOT doesn’t want to go to a thermal segregation specification similar to Washington State DOT’s.
18. Narrow Window on ¾-inch Sieve for Type 2C (88-95) (submitted by Blaine Reese): The concern is that the weight of one or two rocks is enough to put this screen out of specification. Is this specification too sensitive considering the sample size? NDOT could consider a larger top size aggregate for Type 2C. (1–1/8 inch was mentioned but are screens manufactured for this size?)

IV. Identify and Rank Issues for Future Discussion

In order to rank the issues, Rudy asked for each person to pick their top 6 issues. Rudy stated that just because an issue ranks low, it doesn’t mean that it will not be addressed at some point. Some issues, such as shuttle buggy spec, will be addressed because of FHWA interest. Ranking was as follows (items in bold are the top 3 items that will be worked on first):

- 1. Oil Content of Dense-Graded (unanimous)**
- 2. Oil Content of Open-Graded (unanimous)**
- 3. Job-Mix Formula (8 votes)**
4. Alternative to MC Prime Coat (6 votes)
5. Shuttle Buggy (4 votes, tie)
- Use of RAP (4 votes, tie)
- Materials Sites (4 votes, tie)
6. MSE Source Acceptance (3 votes, tie)
- Alternative Burner Fuels (3 votes, tie)
- Turnaround Time on Test Strip Results (3 votes, tie)

7. QC Testing by Certified Labs (2 votes, tie)
Narrow Window on Type 2C Gradation Spec (2 votes, tie)
Oil Content Oven Repeatability (2 votes, tie)
8. Baghouse Fines Reintroduction (1 vote)
9. One Year mix Design Expiration Policy
Consultant R.E.s
Section 106 Rewrite (deferred to Administration Subcommittee)
Hot Drop for Hot Mix Trial

V. Future Meeting Date

August 11, 2008 at 1:30 p.m. Dean will check on the NDOT HQ 3rd Floor Conference Room in Carson City and Rudy will check on the NDOT Las Vegas Building A Conference Room for video-conferencing.