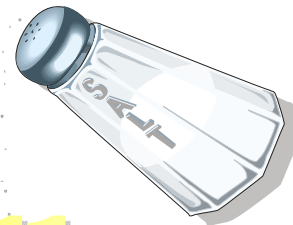

STATE AID
STATE AID

SCENE

2011



[Http://www.dot.state.mn.us/stateaid/SA-Scene.html](http://www.dot.state.mn.us/stateaid/SA-Scene.html)

March, 2011

No. 59

EMPLOYEE NEWS:

Mobilities:

Patti Loken returned from her mobility in Duluth on Feb. 28 and will again be the Programs Engineer, as Merry Daher returns to her position as Plans Engineer. Petra DeWall will return to the Bridge office this month from her mobility, after replacing Merry Daher while working in State Aid.

New Staff:

We are pleased to welcome Mao Yang to SALT on March 16 as her home base after completing her grad rotations. She graduated from the U of M in 2009 after serving in the MN Army National Guard (including a tour in Iraq). Her experience at Mn/DOT has been in Metro Water Resources, Office of Technical Support, Metro Pre-Design, Final Design, and Traffic Sections, Mn/DOT's Ombudsman Office, Eden Prairie Construction and most recently District 6 Materials Section. She will be working in SALT's State Aid Programs Section under Patti Loken assisting with the Safe Routes to School program among other duties.

Retirements:

Mary Bieringer will retire March 15, with Gary Reihl replacing her on a mobility assignment as the Project Development/Environmental Engineer until a permanent replacement is hired.

District State Aid Assistants Terry Nichols is retiring from District 3, and Bob Kotaska retired March 1 from District 4. Jeff Buschette is back-filling in Bob's position.

Doug Haeder plans to retire on June 29. He came to District 7 State Aid in October 1990, after serving as Pipestone County Engineer for 8 years. His career prior to that included ten years working in South Dakota. Doug has witnessed many changes in State Aid over the last 20 years, but the constant has been seeing some great people do some really great work. Doug and Dottie plan to enjoy time with their two sons, daughters-in-law and five grandchildren in Mankato and Shakopee.

Mary Ann Hillyer and Joe Thomas will retire from State Aid June 2 and June 3 respectively. Joan Peters, State Aid Finance will retire June 1.

Best wishes to all the retirees as they begin a new chapter in their lives and thank you to all for your contributions to Mn/DOT and State Aid.

BRIDGE NEWS:

Effective February 16th, Nancy Daubenberger became the new State Bridge Engineer. She replaced Duane Hill, who was the acting State Bridge Engineer since June 2010. Duane Hill is resuming his position as the Assistant District Engineer for Maintenance Operations for District 1. Duane enjoyed working at the Bridge Office. "There was something new every day and the people here [at Bridge] were great to work with." Working in the Bridge Office has also allowed him to develop new relationships within Mn/DOT Central Office, Districts and local government.

Nancy Daubenberger was the Bridge Planning Engineer and managed the Bridge Planning section. She holds a Bachelor of Science from North Dakota State University and a Master of Civil Engineering with an emphasis in Structural Engineering from the University of Minnesota. Nancy is excited to embark on the opportunities and challenges she will face in this new position. "Due to the level of expertise, commitment and character within us as an office, I am confident the Mn/DOT Bridge Office will continue to be a leader in the industry and continue as one of Mn/DOT's strengths as an agency."



Nancy Daubenberger & Duane Hill, Mn/DOT Bridge Office

FEDERAL AID NEWS:

NINE (9) DIGIT PROJECT NUMBER FORMAT

We've been dodging it for a number of years, but due to the many electronic applications that are now interacting, it became necessary to establish the consistent use of a 9 digit format for all State Aid project numbers:

3 sets of 3 numbers
- ### -



Agency Number – Route/System Number - Sequence Number

Leading zeros should be used with the agency and sequence numbers where necessary.

Project number formatting is described in more detail on the State Aid website at <http://www.dot.state.mn.us/stateaid/ProjDeliv/Plans/forms/SAProjectNoFormat.pdf>

All State Aid and Federal aid plans and documentation should be submitted with 9 digits.

2010 LOCAL AGENCY ARRA PROJECTS REPORT FROM THE FHWA

In 2010, the FHWA reviewed 63 locally administered ARRA Projects, including 42 Metro projects and 21 projects in greater Minnesota. The following eleven specific risk areas were identified and evaluated and specific recommendations made that warrant attention:

1. Poster Boards
2. Disadvantaged Business Enterprises (DBE)
3. Project Staffing
4. Traffic Control
5. Labor Compliance
6. On-the-Job Training (OJT) Compliance
7. Buy America
8. Quality Assurance
9. Proprietary Products
10. Contract Changes
11. Contract Documents

The following recommendations were made as a result of the reviews and apply to all federally funded projects:

- 1) Poster Boards must be periodically reviewed to assure they include all of the correct information. See <http://www.dot.state.mn.us/const/labor/posterboards.html>
- 2) Mn/DOT should review their DBE procedures to ensure they are in accordance with Federal requirements
- 3) No recommendations on Staffing
- 4) When working in a narrow confined area with portable concrete barriers separating the work area from traffic, install an impact attenuator designed for tight locations such as the “Absorb 350” by Road Systems Inc. or “Triton Barrier Concrete End Treatment” by Energy Absorption Systems, Inc., instead of sand barrel crash cushions.
- 5) When making field Labor Compliance reviews, project personnel need to obtain enough information to assure the employee is being paid proper wages and benefits, then document reviews and certified payrolls. In addition, document resolutions to any discrepancies found.
- 6) OJT compliance requires including a bid item and designating \$1.00 per hour for the price to be paid for OJT in the schedule of prices. In addition, it is recommended that a representative from the Mn/DOT Office of Civil Rights attend all pre-construction conferences or meet with project personnel early in the project life to explain OJT requirements and roles and responsibilities. Note that there are differences between

Mn/DOT's project based OJT program and Mn/DOT's Contractor based OJT Pilot program. You can read more on OJT at:

<http://www.dot.state.mn.us/civilrights/eeo/eeo.html>

- 7) Manufacturer's certifications, including Buy America, should be obtained prior to incorporation of the product in the project.
- 8) Quality Assurance – personnel should pay closer attention to the requirements of the standard specifications and special provisions for acceptance of materials.
- 9) LPS's must obtain a public interest finding (PIF) for any patented or proprietary material, specifications, or process included in the plans and specifications for all Federal Aid projects. See http://www.dot.state.mn.us/stateaid/sa_plan_design-prep_design-tools.html for guidance on PIF's.
- 10) Unless the contract special provisions specifically allow some other method, all contract changes, including extensions of completion dates, should be timely documented and in accordance with the State Aid Manual/State Aid Construction Tools/Contract Administrative Guidance, Contract Changes and Contract Flow Chart in the Delegated Contract Process (DCP). See: <http://www.dot.state.mn.us/const/tools/contractchange.html>
- 11) Contract Documents
 - a. Resident preference language must not be included in any Federal-aid contract
 - b. The "Equal Employment Opportunity (EEO) Special Provisions Revised 3/07" which includes Form FHWA 1273, "Required Contract Provisions, Federal-aid Construction Contracts" must be *physically* incorporated into every contract.
- 12) ADA Compliance – LPS's need additional design guidance in retrofitting sidewalks and intersections to meet ADA Standards.

Questions on any of the recommendations should be directed to Merry Daher, 651/366-3821.

MnCMAT Training

The Minnesota Department of Transportation's State Aid for Local Transportation (SALT) is offering classroom style training on the use of the Minnesota Crash Mapping Analysis Tool (MnCMAT) and crash data.

The main event for this training will be the new web-based version of MnCMAT. We will also be discussing the source and uses of crash data. The instructors will be Mark Vizecky and Sulmaan Khan.

Six training sessions will be offered at the following dates, times and locations:

Date	Location	Time
Thursday, March 24	Arden Hills Training Center (Room 2)	8:30 am - 11:30 am
Thursday, March 24	Arden Hills Training Center (Room 2)	12:30 pm - 3:30 pm
Friday, March 25	Arden Hills Training Center (Room 2)	8:30 am - 11:30 am

Friday, March 25	Arden Hills Training Center (Room 2)	12:30 pm - 3:30 pm
Monday, March 28	Arden Hills Training Center (Room 3)	8:30 am - 11:30 am
Monday, March 28	Arden Hills Training Center (Room 3)	12:30 pm - 3:30 pm

Mn/DOT Training and Conference Center
1900 West County Road I
Arden Hills, MN 55126

Please indicate the session you wish to attend in an e-mail to mncmat.dot@state.mn.us.

Laptop computers will be provided for each of the training sessions. Class size is limited to no more than 20 attendees per session.

Preference will be given to County and City Traffic Safety Staff, so please submit the names of registrants in order of registration importance. Confirmation will be provided at a later date.

Please submit your registration no later than March 17th.

If you have additional questions on the content of the class, please feel free to contact Mark at 651-366-3839, Sulmaan at 651-366-3829 or send an e-mail to mncmat.dot@state.mn.us.

STATE AID NEWS:

SA (State Aid) Concrete Pavement Design Guidance and SA Flexible Pavement Design Guidance

State Aid has recently updated the design guidance for both rigid (concrete) and flexible (bituminous) pavements. Pavement design is migrating from empirical methods to design methods based more on material properties.

The [SA Concrete Pavement Design Guidance](#) and the [SA Flexible Pavement Design Guidance](#) can be found in the Hot Topics section of the [State Aid website](#).

Bituminous Specifications 2360, 3139 & 2399 – Plant Mixed Asphalt

FROM: John Garrity, Bituminous Engineer

PHONE: 651-366-5577

SUBJECT: 2011 Bituminous Specifications 2360, 3139, and 2399

The Bituminous Specifications for the 2011 construction year have been completed and are available in PDF format on both the Bituminous Office website, www.dot.state.mn.us/materials/bituminous.html, and the Special Provisions Office website, www.dot.state.mn.us/pre-letting/prov/pdf/sp2005.pdf. It is recommended you begin including these specifications in any contracts that include bituminous construction as soon as possible.

This year's changes include more than just 2360. Specification 3139, Graded Aggregate for Bituminous Construction, has been modified and there is a new smoothness specification, 2399.

The purpose of this memo is to discuss some of the more significant changes to 2360, 3139, and 2399 and provide additional guidance in other areas.

Specification Format

The 2011 specification format looks much different than previous years' specifications. In addition to sentence structure being changed from passive to active voice the specification is now divided into five major headings: Description, Materials, Construction, Measurement, and Payment. The format change allows us to be consistent with AASHTO and the other discipline areas that will be included in the 2010 Standard Specification for Construction Book. Also changed is the location of the requirements for ride, graded aggregate for bituminous, and bituminous material.

Specification Changes

Highlights of technical changes to the 2360, 3139, and 2399 are attached to this memo (Attachment #1); however, some of the more significant changes are addressed here:

2360 Changes

Ignition Oven Correction Factor: On the first day of production, for each mixture type, both the Contractor and the Agency will establish an ignition oven correction factor from the produced mixture. The new procedure is discussed in the Lab Manual, 1853 Appendix.

Ratio of New Added Asphalt to Total Mixture Asphalt: Minimum 70% ratio of new added AC/Total AC for all mixtures that include recycled asphaltic material.

Internal Angle Calibration of Gyratory Compactor: Measurement of gyratory angle will be based on the internal angle of 1.16 degrees. All gyratory compactors must be calibrated internally when referencing the 2011 specification. Since there have already been Contracts let referencing the 2010 Bituminous Specification (external angle calibration) the Bituminous Office is recommending all Contracts constructed in the 2011 construction season utilize internal angle calibration of the gyratory compactor. This would require a Supplemental Agreement for pre-2011 Contracts. It would be very difficult for Contractors and District Labs to administer projects when both types of gyratory compactor calibration could be required. The Bituminous Office will develop a Supplemental Agreement and get that SA to you before the 2011 construction season begins.

Mat Density Incentive Payment: The payment schedule for mat density has been adjusted to reflect differing incentive factors for Traffic Level 2&3 mixtures as compared to Traffic Level 4&5 mixtures. The maximum incentive for Traffic Level 2&3 mixtures is 3%, previously it was 4%. In Traffic Level 4&5 mixtures the maximum incentive was raised to 5% from 4% and the lower incentive was raised from 2% to 4%.

Longitudinal Joint Density Requirement and Payment: Density requirements have been increased for longitudinal joint density and payment factors have been adjusted.

2399 Specification (Pavement Surface Smoothness)

The ride specification is no longer embedded in 2360. This is the specification that utilizes the inertial profiler to measure smoothness by International Roughness Index (IRI). The 2399 specification includes smoothness requirements for both asphalt and concrete roadways. Under 2399, both profiler equipment and operators must be certified, smoothness is evaluated in both wheel paths, and, ride is measured on roads down to a speed limit of 30 mph. Surface requirements, including that for the 10-foot straightedge measurement, are still in 2360.

3139 Specification (Graded Aggregate for Bituminous Spec)

All aggregate requirements, including the table for "Mixture Aggregate Requirements", have been moved to specification 3139. Table 3139-3, Mixture Aggregate Requirements, shows requirements for crushing, spall, etc. The most noticeable change on the table, as compared to last year, is the elimination of the maximum allowable percentage for RAP. However, the 70% ratio as discussed above must be met on all mixes that include RAP. In most cases, the 70% ratio will continue to limit allowable RAP to 30% max. The Table still contains the 5% maximum allowable limit for inclusion of scrap shingles. Table 2360-3 limits RAP to 20% when a PG XX-34 is specified.

General Design

In Superpave gyratory design for local government the top 3" of pavement is considered the wearing course (MnDOT uses 4"). Any pavement in the top 3" of structure should be specified as wear "WE". Estimated quantities and typical sections should reflect this. Below 3" from the top of the pavement should be specified as non-wear "NW". The difference between wear and non-wear is air voids, fine aggregate angularity, and crushing.

Mixture Design

The 2011 specification continues to be gyratory design only; Marshall mix design is not included. Attachment #2 shows equivalent Marshall design to gyratory design replacements. MnDOT District Labs will no longer issue Marshall mix MDR's. Additionally, the District Labs will no longer accept verification test samples using Marshall mix design.

Summary of What to Include in 2011 Bituminous Contracts

The following list includes all of the relevant special provisions that must be inserted into contracts for bituminous construction:

- 1) 2360 Bituminous Specification
- 2) 3139 Graded Aggregate for Bituminous Mixtures Specification
- 3) 2357 Tack Coat Specification
- 4) 2399 Pavement Smoothness Specification

Reminders

Please be aware of the following items in the 2360 and 2399 specifications:

Density – Maximum Density without Longitudinal Joint Evaluation

In Section 2360.3 D.1, Maximum Density, there is the requirement to evaluate longitudinal joint density in 1 lot per day. MnDOT feels this will help improve the performance of the longitudinal joint through better construction practices. However, we understand there might not be interest in its use at the local level. If it is your intent to evaluate mat density only, use

special provision SP 2005-140.1 located on the Bituminous Office website or Special Provision Office website.

Maximum density without longitudinal joint evaluation was available last year too; however, Special Provision SP 2005-140.1 has a couple of modifications as compared to last year's special provision. This year's modifications are:

- 1) Companion cores will be taken at all coring locations.
- 2) Tolerances on cores are evaluated on both a single core basis (what we have done in the past) and on an average of the day's bulk gravities basis (shrinking tolerance).

Ride

Specify in the 2360 special provisions if smoothness is to be evaluated by 2399. You must also specify which ride equation to use for evaluation. If 2399 is not specified surface evaluation will be limited to the 10-foot straightedge.

If you have any further questions regarding the 2011 specification, please contact John Garrity, Bituminous Engineer, at 651-366-5577.

Attachment #1, Spec Changes

Highlighted below are the major changes related to this year's specifications. Most of these changes reflect need to change the language and formatting to be consistent with the rest of the specifications in the 2010 Standard Specifications for Construction Book that will be release next year. A general overview of the new 2360 specification is shown below, since it has changed from what we have used in 2010.

- 2360.1 **Description**
 - A Mixture Designation
- 2360.2 **Materials**
 - A Aggregate - See Specification 3139
 - B Asphalt Binder Material – See Specification 3151
 - C Additives
 - D Bituminous Tack Coat – See Specification 2357
 - E Mixture Design
 - F Mixture Design Report
 - G Mixture Quality Management
- 2360.3 **Construction Requirements**
 - A Restrictions
 - B Equipment
 - C Joints
 - D Compaction
 - E Surface Requirements
 - F Asphalt Mixture Production (FOB Department Trucks)
 - G Small Quantity Paving
- 2360.4 **Method of Measurement**
- 2360.5 **Basis of Payment**

FINANCE NEWS:

Per DCP Guidelines, when submitting partial estimates costs must be certified in categories in the same format as the engineer's estimate, which also matches the project set up. (See process 3.23 below from the DCP Checklist.)

A lot of DCP payment requests have been submitted to SAF with all costs certified in the first category because it is a participating category, even though the costs should have been split amongst the par and non-par categories. Payment requests received in this format can not be processed and will delay your payment.

3.23 LPA prepares **Partial Estimate** at least monthly
[Must be in engineer's estimate format; showing the breakdown of federal participating & non-participating for each category/group.](#)
Certified by Project Engineer & Contractor

Certification of Final Acceptance

We were asked to investigate whether notarization of this form was a statutory requirement because some local governments felt it created a burden to locate a notary. After discussion with Mn/DOT's Contract Management Office, we found no statute or rule that required this document to be notarized. Therefore, Mn/DOT will no longer require notarization. The decision to notarize this document will be left to the local government.

Notarization does not make a document legal, however, it does create the presumption that the signature is authentic and may keep the parties from having to litigate the authenticity of the signature.

Local governments may want to check with their local government attorney on whether they want to continue to notarize the document.

EVENTS:

Variance Committee Meeting

The next Variance Committee meeting is scheduled for March 24. All Variance Committee meetings are held at the Mn/DOT Training Center, 1900 West County Road I, Shoreview, MN. All supporting documentation for this variance meeting should have been submitted by March 1.

Please submit at least 7 copies of the documentation. The variance request and documentation should be sent to : State Aid for Local Transportation, Attn: Julie Skallman, 395 John Ireland Boulevard, Mailstop 500, St. Paul, MN 55155.

Please contact your District State Aid Engineer early for assistance and advice regarding variances or possible options to avoid the need to request a variance. The DSAE should be copied on all request submittals and subsequent information or correspondence regarding the requests.

If you have questions or need assistance regarding the requirements for requesting a variance, please contact your District State Aid Engineer or Joe Thomas at 651-366-3831 for further information or assistance.

For variance Information, please see the State Aid Home page under “Quick Links” on the right side of the screen.

2011 County Spring Pre-Screening Board Meetings

The spring pre-screening board meetings will be held on the following dates:

Thursday, May 5, Metro District at Waters Edge from 9:00 a.m. – 1:00 p.m.

Monday, May 9, District 1 in Duluth

Wednesday, May 11, District 8

Thursday, May 12, District 3 from 9:30 – noon

Monday, May 16, District 6 at the Rochester DOT office

Wednesday, May 18 & 19, Districts 2 and 4 at the C'mon Inn in Park Rapids

Thursday, May 19, District 7

The County Screening Board meeting will be held May 25-26 and the City Screening Board meeting will be held May 24-25.

For further information about these meetings, please contact Kim DeLaRosa at 651-366-3810.

2011 City Spring Pre-Screening Board Meetings

Tuesday, May 10, District 1 from 10 – noon in Lake Superior Rooms, Duluth Office

Wednesday, May 11, District 6 from 10 – noon in Conf. Rm. D6A East, Rochester Office

Thursday, May 12, Districts 7 & 8 from 11 – 2:30 at Veigel's Kaiserhof, 221 N. Minnesota St., New Ulm

Monday, May 16, Districts 2 & 4 from 10 – noon at Detroit Lakes District Office

Wednesday, May 18, Metro from 8:30 – noon at the Hiway Federal Credit Union Bldg, 840 Westminster St.

Thursday, May 19, District 3 from 9:30 to noon, possibly at the Stearns Co Public Works Bldg. in Waite Park