



# **PAPA Regional Technical Meetings**

(Cranberry Twp. , State College , Allentown)

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# **Publication 408 Series 400 Rewrite**

What's Changing?

# Today's Discussion

- Background
- Approach
- Section Review/Clearance Transmittals
- Final Steps

# Background

## August 2018

- Department Construction Process/Quality Team met to discuss the update/rewrite of Publication 408 Construction Specifications
- Focus on reducing/eliminating special provisions and incorporating needed updates
- Construction Specifications normally updated on a 4 year cycle (Publication 408 last updated April 1, 2016)

# Approach

## September 2018

- Team leaders and members were selected for each specification section team comprised of PennDOT, Turnpike, Industry and FHWA representatives.
- A kick-off meeting was held at the Lab in Harrisburg to discuss the direction of the rewrite effort
- Target February 2019 to have most clearance transmittal changes in place for spring 2020 roll out new Publication 408

## 400 Series Team

### Team Lead:

Rich Polenik-PennDOT District 10 Materials

### Team Members:

PennDOT-Neal Fannin, Lydia Peddicord, Adam Ostinowsky, Steve Koser, Tim Ramirez, Garth Bridenbaugh, Brian Shannon, Nhan Phan

Industry-Charlie Goodhart, Gary Hoffman, Jeff Frantz, Tom Abbey, Mike Worden, Ed Morrison, Scott Grannas

Turnpike-Terry Dreher

# 400 Series Group Effort

## Prioritize sections for review

- The team determined high and low priority sections to review based on number of special provisions, District surveys and Industry concerns.

## Special Provisions

- 60 District and standard specials were reviewed for all 400 series sections
- Of the 60, 9 have been incorporated throughout various sections, 37 have been deleted and 14 have been kept for continued use

## Section Changes

- Based on the groups review, 12 of the 25 sections are going through the clearance transmittal process for change

## Section Changes 405, 450, 460, 467 and 469

Clearance Transmittal Changes: H-18-042

Due 1/7/19

### Section 405 Longitudinal Joint Incentive/Disincentive

- Increase joint density from 90.0% to 91.0% and increase pay incentive/disincentive \$5000/\$10,000 to \$7500/\$12,500 respectively
- Removed corrective action of over banding
- Changes based on analyzing joint density data and adjusting to current construction results



## Section Changes 405, 450, 460, 467 and 469

### Section 450 Manual Bituminous Patching

- Decreased minimum patch size from 4 SF to 1 SF. Minimizes removal of sound pavement adjacent to patch areas
- Eliminate tack as a separate pay item. Included in unit price of patching now.
- Simplify payment of item

### Section 460 Bituminous Tack Coat

- Include asphalt residual rate for Cold Recycled Base Course (0.01 to 0.015)
- This change has been moved to Section 341

## Section Changes 405, 450, 460, 467 and 469

### Section 467 Heavy Duty Membranes

- Allows use of heavy duty membranes on a milled surface.
- Requires a manufacturers technical representative or certified installer.
- Changes based on District use and good performance results

### Section 469 Asphalt Joint and Crack Sealing

- Simplified the description of the item of work. Removed language requiring prepackaged material and created general statement for applicable material
- Include gallon as unit of measure for sealer and ton for SP4.75 mm asphalt mixture

## Section Changes 46X and 489

Clearance Transmittal Changes H-19-003  
Due 2/13/19

### Section 46X Bituminous Paving Fabric

- New section to include Bituminous Paving Fabric specifications for use
- Considering to include other reinforced interlayer type products in this section

## Section Changes 46X and 489 con't.

### Section 489 Ultra Thin Bonded Wearing Course

- Changed Emulsified Asphalt reference UTWCEM to UTFCEM to align with Bulletin 25 terminology
- Edited text within tables B, D and E to define minimum crush faces for aggregate, specimen void content and sieve reference corrections
- Added placement requirements to address material delivery to avoid stoppages and minimizing transverse joints.
- Adjusted placement dates according to PG binder used

## Section 491 and 404

### Section 491-Milling of Bituminous Pavement Surface

- Text change was made to remove working days and replace with calendar days when calculating Work Zone Liquated Damages.
- Minor change to specification. Submitted to FHWA for review and approval

### Section 404-Evaluation of Bituminous Pavement Ride Quality and Payment Incentive

- This section is currently being edited and will be discussed with the team prior to being submitted into the clearance transmittal process.

## Section 409 and 411 (413)

These sections are still being reviewed by the group with the following changes being considered and implemented:

- Combine Section 409 HMA with 411 WMA into one section (413) and require all asphalt paving be Warm Mix
- Require over banding of all longitudinal wearing surface joints (taken from section 405)
- Change performance grade binder reference to the current national designation. (PG 58S-28, PG 64S-22, PG64E-22)
- Included Multiple Stress Creep Recovery (MSCR) testing  
AASHTO M 332

## Section 409 and 411 (413) con't.

- Incorporation of the Safety Edge Special Provision into the specification.
- Include Gmm verification special provision into the specification for Federally funded and NHS projects
- If requested by the Representative, provide an access point on a hauling unit to conduct temperature checks of the mixture
- Change text references from “bituminous” to “asphalt binder” for the liquid and “asphalt mixture” for completed mix.
- Use a 12 foot straight edge for surface tolerance checks

## Section 419

This section for SMA is still being reviewed by the group with the following changes being considered and implemented:

- Using Warm Mix as a standard
- Provide a range of Combined Aggregate Bulk Specific Gravities in Table C
- Specify use of wax-lined boxes when obtaining mixture composition samples
- Change performance grade binder reference to the current national designation  
i.e PG76-22 = PG64E-22



## Final Steps

### Sections 405, 450, 460, 467, 469 and 491

- Comments addressed from clearance transmittal process currently under review at FHWA

### Sections 46X and 489

- Comments from the clearance transmittal process are being reviewed by the group.
- Finalizing sections to submit to FHWA

### Sections 404, 409/411(413) and 419

- Group continues to work on updates and revisions targeting a clearance transmittal circulation for Mid-summer 2019

# Questions/Comments???



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