

INDIANA DEPARTMENT OF TRANSPORTATION



INTER-DEPARTMENT COMMUNICATION



232-6775

May 13, 2004

DESIGN MEMORANDUM No. 04-03 POLICY CHANGE

TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/ Anthony L. Uremovich
Anthony L. Uremovich
Design Policy Engineer
Contracts and Construction Division

SUBJECT: New *Indiana Design Manual* Chapter 52, Pavement Design

SUPERSEDES: Existing *Indiana Design Manual* Chapter 52

EFFECTIVE: March 16, 2005, Letting

The revisions to Chapter Fifty-two are summarized below. A complete version of the replacement chapter has been developed as an attachment to Design Memorandum 04-03 Technical Advisory.

A. Text Revisions.

1. For QC/QA-HMA pavement Intermediate and Base courses, the C25 and C19 aggregate-size designations have been changed to OG25 and OG19, for Open Graded.
2. For scoping purposes, the minimum pavement thickness to be assumed for new alignment, pavement replacement, or rehabilitation work is to be 350 ± 50 mm (14 ± 2 in.)
3. The PCCP thickness shown in pay items is to be designated to the higher 12 or 13 mm ($\frac{1}{2}$ in.). The pay unit is unchanged. The additional pay item code numbers and pay item names for the required 13-mm ($\frac{1}{2}$ in.) increments are as follows:

a. QC/QA-PCCP.

501-08193	QC/QA-PCCP, 263 mm QC/QA-PCCP, 10.5 in.
501-08194	QC/QA-PCCP, 288 mm QC/QA-PCCP, 11.5 in.
501-08196	QC/QA-PCCP, 313 mm QC/QA-PCCP, 12.5 in.
501-08197	QC/QA-PCCP, 338 mm QC/QA-PCCP, 13.5 in.
501-08198	QC/QA-PCCP, 363 mm QC/QA-PCCP, 14.5 in.
501-08199	QC/QA-PCCP, 388 mm QC/QA-PCCP, 15.5 in.

b. Non-QC/QA-PCCP.

502-08201	PCCP, 238 mm PCCP, 9.5 in.
502-08202	PCCP, 263 mm PCCP, 10.5 in.
502-08203	PCCP, 288 mm PCCP, 11.5 in.
502-08204	PCCP, 313 mm PCCP, 12.5 in.
502-08205	PCCP, 338 mm PCCP, 13.5 in.
502-08206	PCCP, 363 mm PCCP, 14.5 in.
502-08207	PCCP, 388 mm PCCP, 15.5 in.

4. For pavements with fewer than 3,000,000 ESALs, the non-mainline mixtures may be non-QC/QA.
5. The HMA pavement sections to be used for approaches are shown on the INDOT *Standard Drawings* for the maximum AADTs shown thereon. Such sections have been deleted from the *Design Manual*. Sections with AADT greater than shown on the *Standard Drawings* are to be designed in accordance with *Design Manual* Section 52-8.0, Pavement Design Procedural Guidelines.

The pay items to be used with each type of approach are as follows:

Approach Type	Pay Item
Public Road, A	HMA for Approaches, A, or PCCP for Approaches
Public Road, B	HMA for Approaches, A
Public Road, C	HMA for Approaches, A
Public Road, D	HMA for Approaches, B
Drive, I	PCCP for Approaches
Drive, II	HMA for Approaches, A
Drive, III	PCCP for Approaches
Drive, IV	HMA for Approaches, B
Drive, VI	HMA for Approaches, B
Drive, VII	PCCP for Approaches

6. HMA Widening of greater than 1.5 m (5 ft) width is no longer considered widening and is to be designed in accordance with *Design Manual* Section 52-8.0.
7. For PCCP rehabilitation, patching limits have been defined.
8. A new section regarding composite pavements, for new construction and rehabilitation, has been added.

B. Figures Revisions.

1. Open Graded courses, where required, are shown and defined.
2. For pavements with fewer than 1,000,000 ESALs, an earth shoulder option has been added.
3. Figures have been added regarding the following:
 - a. Underdrain detail for HMA pavement, greater than 30,000,000 ESALs;
 - b. Ramp section, HMA full-depth pavement;
 - c. Ramp section, PCCP full-depth pavement;
 - d. Ramp section, HMA overlay;
 - e. HMA pavement section with concrete curb and underdrain;
 - f. HMA pavement section with concrete curb, but without underdrain; and
 - g. Pavement sections for parking lots.

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