

# INDIANA DEPARTMENT OF TRANSPORTATION



INTER-DEPARTMENT COMMUNICATION

*Standards Section – Room N642*



*Writer's Direct Line  
232-6775*

March 28, 2005

**DESIGN MEMORANDUM No. 05-07**  
**TECHNICAL ADVISORY**

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

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

**SUBJECT:** Maximum Allowable Stress in H-Piles

**EFFECTIVE:** Design Approval On or After April 1, 2005

The INDOT *Standard Specifications* have been revised such that H-piles must now be ASTM A 572 Grade 345 (ASTM A 572 Grade 50.) The piling design should be based on a maximum allowable stress of  $0.25F_y$ , or  $0.25 \times 345 \text{ MPa} = 86 \text{ MPa}$  ( $0.25 \times 50 \text{ ksi} = 12.5 \text{ ksi}$ ).

For a project which received design approval before April 1, 2005, the piling design may be based on this requirement, or the prior one of  $0.25 \times 250 \text{ MPa} = 62 \text{ MPa}$  ( $0.25 \times 36 \text{ ksi} = 9 \text{ ksi}$ ). If the prior one is used, there can be no increase in design fee, if applicable.

alu