

Indiana Mineral Aggregates Association Winter Workshops

Jim Reilman, MS, PE, PMP
State Materials Engineer
Division of Materials and Tests
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Updates

- Specification Changes
- Indiana Test Methods
- Other

Specification Updates

- In all, the last year has been pretty quiet as far as specification changes.



Specification Updates

- September 2022
 - Minor clarification added to 904.06 (Riprap).

(f) Sizes of Riprap

| Gradation Requirements | | | | | |
|------------------------|-----------|----------|----------|-----------|-----------|
| Percent Smaller | | | | | |
| Size, in. | Revetment | Class 1 | Class 2 | Uniform A | Uniform B |
| 30 | | | 100 | | |
| 24 | | 100 | 85 - 100 | | |
| 18 | 100 | 85 - 100 | 60 - 80 | | |
| 12 | 90 - 100 | 35 - 50 | 20 - 40 | | |
| 8 | | | | 100 | |
| 6 | 20 - 40 | 10 - 30 | 0 - 20 | 35 - 80 | 95 - 100 |
| 3 | 0 - 10 | 0 - 10 | 0 - 10 | | 35 - 80 |
| 1 | | | | 0 - 20 | 0 - 20 |
| Depth of Riprap, min. | 18 in. | 24 in. | 30 in. | | |

Specification Updates



The maximum dimension of individual pieces shall not be greater than three times the minimum dimension *and no dimension shall exceed the maximum size listed for the respective size of riprap.* The riprap will be visually inspected for size, shape, and consistency.

Specification Updates

- November 2022
 - No. 53 Dense Graded Coarse Aggregate
 - Adjusted allowable upper limit passing the No. 200 sieve from 10% to 13%.
 - After months of discussion between IMAA and INDOT.
 - Deemed easier to produce and compact
 - Effective for use beginning with June 2023 lettings (Testing Memo 22-03 allows its use on active contracts)

Specification Updates

- Change is on No. 200 sieve

| Sieve Sizes | Dense Gr |
|--------------------------------|-----------------------------|
| | 53 ⁽¹⁾ |
| 4 in. (100 mm) | |
| 3 1/2 in. (90 mm) | |
| 2 1/2 in. (63 mm) | |
| 2 in. (50 mm) | |
| 1 1/2 in. (37.5 mm) | 100 |
| 1 in. (25 mm) | 80 - 100 |
| 3/4 in. (19 mm) | 70 - 90 |
| 1/2 in. (12.5 mm) | 55 - 80 |
| 3/8 in. (9.5 mm) | |
| No. 4 (4.75 mm) | 35 - 60 |
| No. 8 (2.36 mm) | 25 - 50 |
| No. 16 (1.18 mm) | |
| No. 30 (600 μm) | 12 - 30 |
| No. 200 (75 μm) ⁽²⁾ | 5.0 - 10/3.0 ⁽⁴⁾ |
| Decant (PCC) ⁽³⁾ | |
| Decant (Non-PCC) | |
| Decant (SC) | |

Specification Updates

- January 2023
 - Structure Backfill Type 3 (MSE Walls) Changes
 - Effective with September 1, 2023 contracts (the 2024 spec book)
 - No. 4 structure backfill **NO LONGER ALLOWED**
 - (this is NOT retroactive and does not apply to contracts let before September 1, 2023.)
 - Allowable Materials: structure backfill nominal size 1 in. or 1/2 in., or coarse aggregate Nos. 5, 8, 9, 11, 12, or AASHTO No. 57.
 - (Note No. 30 structure backfill has not been allowed for 10 years or more.)

Specification Updates



Loss of Backfill



Subsidence due to loss of backfill

Specification Updates



Bulging Panels



Failure

Indiana Test Method (ITM) Updates

- ITM 210 – Class AP Coarse Aggregate
- ITM 219 – Acceptance Procedures of Steel Furnace Slag for Deleterious Materials

Indiana Test Method (ITM) Updates

- ITM 210
 - Added gradation table for when maximum particle size is 1-1/2 in. in the preparation of test sample section.
 - (The gradation table remained the same when the maximum particle size is 1 in.)

Indiana Test Method (ITM) Updates

- ITM 210

8.1 Coarse Aggregate. The sample shall be separated into the required sieve sizes in accordance with AASHTO T 27. Depending on the maximum particle size of the material, the quantity from each sieve size shall be recombined to obtain the following gradation:

Maximum particle size of 1-1/2 inch.

| Sieve Size | Percent Passing |
|------------|-----------------|
| 1-1/2 in. | 100 |
| 1 in. | 95 |
| 3/4 in. | 70 |
| 1/2 in. | 45 |
| 3/8 in. | 20 |
| No. 4 | 0 |

Indiana Test Method (ITM) Updates

- ITM 219
 - Added/clarified language in the Sample Preparation section regarding how the sample is to be reduced to the testing size.

9.1 Reduce the sample in accordance with AASHTO R 76-16 (Standard Practice for Reducing Samples of Aggregate to Testing Size) to a sample size of $1500 \pm 50\text{g}$ and decant the sample in accordance with AASHTO T 11.

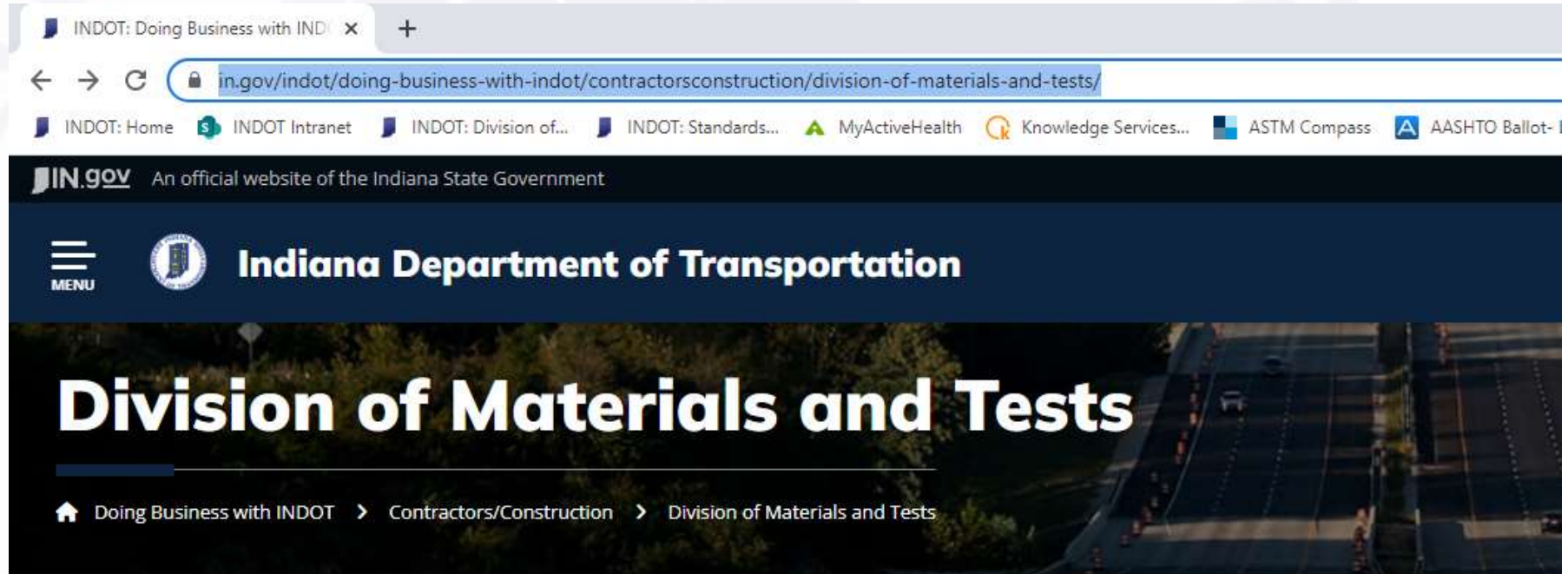
Other Topics

- December 2022 - Certified Aggregate Producers Product List (aka the CAPP D-list, or D-List)
 - Now available online on the QPL page
 - Notice any Errors or Omissions?
Please contact Bart Williamson

BartWilliamson@indot.IN.gov

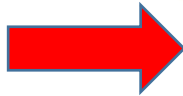
Other Topics

- D-List



INDOT strives to develop, inspect, and test materials used to construct and maintain highways, thereby ensuring the most

Qualified Products and Sources



- [Qualified Products Lists & Qualified Sources Lists](#)
A listing of qualified products and sources that meet INDOT specifications for immediate use on INDOT Contracts.
- [Qualified Hot Mix Asphalt Design Labs](#)
A listing of HMA design laboratories qualified to perform design work for INDOT projects.
- [Ready Mixed Concrete Plants](#)

Certified Aggregate Producers Product List

- https://www.in.gov/indot/doing-business-with-indot/contractorsconstruction/division-of-materials-and-tests/qualified-products-lists_qualified-sources-lists/

| Qualified Products Lists & Qualified Source Lists | |
|---|-------------------------|
| List Name | Specification/ITM |
| ADA Compliant Work Zone Devices | 801.03 & 923.09 |
| Anti-Adhesive Materials | 409.03(b) |
| Asphalt Emulsion Suppliers | 902.01(b) & ITM 593 |
| Automated Flagger Assistance Devices | 923.08 |
| Cable Barrier Systems | 627-R-546 |
| CCF Manufacturers/Installers | 216 |
| Cement Sources | 901.01(b)2d |
| Certified Aggregate Producers | 917 & ITM 211 |
| Certified Aggregate Producers Product List, CAPP D-List | 917 & ITM 211 |
| Certified Hot Mix Asphalt Producers | 401, 402, 410 & ITM 583 |



Thank You

