

# Ohio Sustainable Roadway Materials Workshop

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## Overview

- ▶ Currently Approved Materials
- ▶ New Product Development Process
- ▶ New Product Database
- ▶ Recent New Products
- ▶ New Products Under Trial

## Existing Specifications for Recycled Materials

**Fly Ash**

- Item 499: Concrete - 701.13
- Item 613: Low Strength Mortar Backfill - 701.13
- Item 701: Cementitious Materials - 701.13
- Item 703: Aggregate - 703.11
- Item 706: Concrete Pipe/Culvert Structures - 706.04, 706.05, 706.13
- SS871: Embankment Construction using Recycled Materials

**Bottom Ash**

- Item 703: Aggregate - 703.11
- SS871: Embankment Construction using Recycled Materials

**Foundry Sands**

- Item 613: Low Strength Mortar Backfill - 613.02, 613.05
- Item 703: Aggregate - 703.11
- SS871: Embankment Construction using Recycled Materials

## Existing Specifications for Recycled Materials

**Blast Furnace Slag**

- Item 442: Superpave Asphalt Concrete - 442.03
- Item 499: Concrete - 499.02, 499.07
- Item 605: Underdrains - 605.02
- Item 613: Low Strength Mortar Backfill - 613.02
- Item 703: Aggregate - 703.04, 703.05, 703.08

**Slag Cement**

- Item 499: Concrete General - 701.09, 701.11

**Steel Furnace Slag**

- Item 401: Asphalt Concrete Pavement - 401.03, 703.04, 703.05
- Item 703: Aggregate - 703.01, 703.05, 703.14, 703.16, 703.17, 703.18

## Existing Specifications for Recycled Materials

### Reclaimed Concrete Aggregate

- Item 703: Structural backfill - 703.11
- Item 203: Embankment - 703.16
- Item 411: Stabilized Crushed Aggregate - 703.18
- Item 499: Concrete General - Supp. 1117
- Item 617: Reconditioning Shoulders - 703.18
- Item 601: Slope Protection - 703.19

### Recycled Asphalt Pavement

- Item 401: Asphalt Concrete Pavement - 401.04

### Asphalt Shingles

- Item 401: Asphalt Concrete Pavement - 401.04, Supp. 1116

### Tire Derived Aggregate

- SS871: Embankment Construction using Recycled Materials

### Ground Tire Rubber

- SS887: Ground Tire Modified Asphalt Binder

## New Product Development Process

- ▶ Policy 27-14(P)

[http://portal.dot.state.oh.us/Groups/policies/Policies/27-014\(P\).pdf](http://portal.dot.state.oh.us/Groups/policies/Policies/27-014(P).pdf)

- ▶ Standard Procedure 515-001(SP)

[http://portal.dot.state.oh.us/Groups/policies/Procedures/515-001\(SP\).pdf](http://portal.dot.state.oh.us/Groups/policies/Procedures/515-001(SP).pdf)

## New Product Development Process

- ▶ New Product Definition

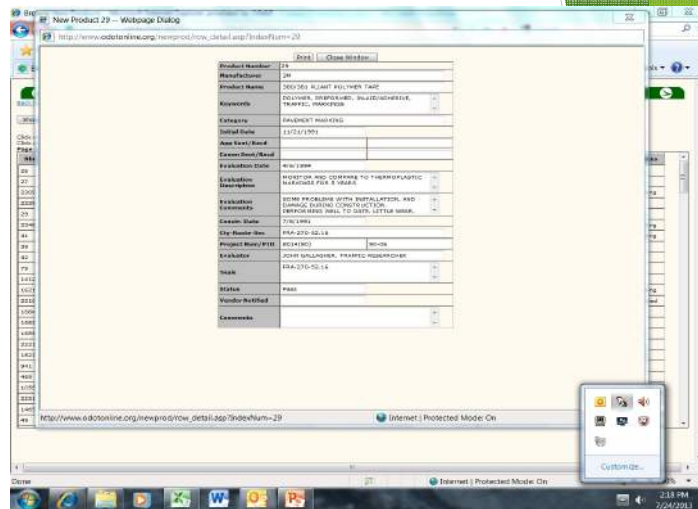
“A product that does not meet an existing Department specification”

## New Product Development Process

- ▶ Send **All** New Products to New Product Engineer
  - ▶ Call to give a heads-up
  - ▶ Complete NP Application + Supporting Documentation
  - ▶ Review by NP Engineer
  - ▶ Review by Department Experts
  - ▶ Determine need?



## New Product Database



## Recent New Products

- ▶ Truncated Domes - 608, 712.14
- ▶ Spray Thermoplastic Pavement Marking - 648
- ▶ Trackless Tack - PIF
- ▶ Steel Portable Median Barrier- alt. to PCB
- ▶ Lift Hole Plugs - 706.02, 706.04, 706.13

## New Product Under Trial

- ▶ Asphalt Penetrating (Rejuvenating) Sealer
  - ▶ Replay, Bio-ReStor, Reclamite, JointBond
- ▶ Pavement Reinforcement Fabrics/Grids
- ▶ Concrete Sealer (Epoxy/Urethane and others)
- ▶ Pothole Patch Material
- ▶ Fibers in Asphalt - Forta-Fiber

## Questions??

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