



# INDIANA DEPARTMENT OF TRANSPORTATION

*Driving Indiana's Economic Growth*

## Design Memorandum No. 10-10 Technical Advisory

March 16, 2010

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

**FROM:** /s/ Richard L. VanCleave  
Richard L. VanCleave  
Roadway Standards Engineer  
Production Management Division

**SUBJECT** Nonmotorized-Vehicle-Use Facility Pavement Sections

**REVISES:** *Indiana Design Manual Section 51-7.06*

**EFFECTIVE:** July 7, 2010, Letting

Standard nonmotorized-use-facility typical sections have been developed for HMA and PCCP. An HMA pavement section has also been developed for use on an abandoned railroad corridor. The selection of HMA or PCCP will be determined by the designer. It will not require presentation to the Pavement Type Selection Committee nor an individual pavement-design review by the Office of Pavement Engineering.

The HMA typical sections appear on Recurring Plan Details 402-R-571d and -572d. The PCCP typical sections appear on Recurring Plan Detail 502-R-573d. These recurring plan details should be called for through the August 4, 2010, letting for each nonmotorized-use-facility project.

Complementary Recurring Special Provision 207-R-575 should be called for through the August 2011 letting if one or more of the typical sections is specified.

All recurring documents are attached herewith.

RLV:dha:alu

## 207-R-575 SUBGRADE TREATMENT FOR TRAILS

(Adopted 01-21-10)

The Standard Specifications are revised as follows:

SECTION 207, AFTER LINE 109, INSERT AS FOLLOWS:

*Type V. 3 in. (75 mm) of subgrade excavated and replaced with  
3 in. (75 mm) coarse aggregate No. 53.*

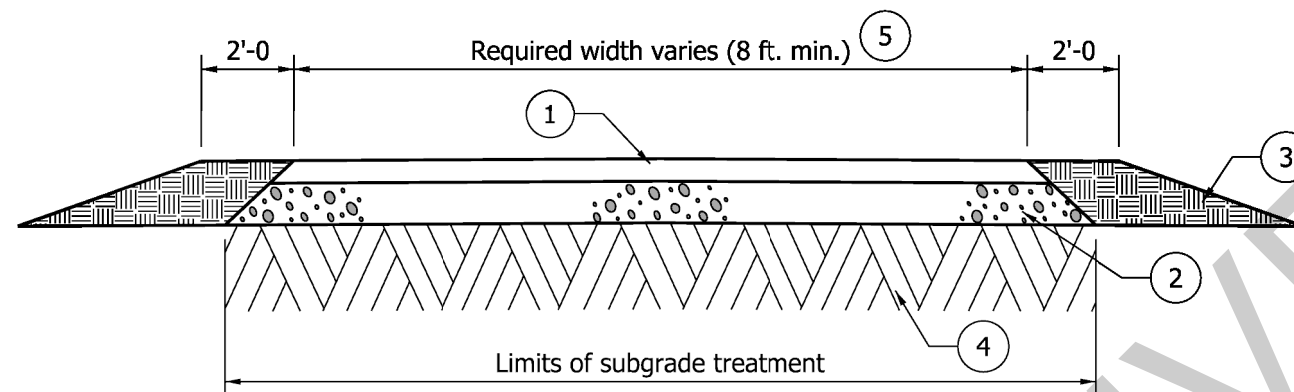
SECTION 207, AFTER LINE 126, INSERT AS FOLLOWS:

*The existing railroad ballast and railroad bed material shall be excavated to the depth specified for subgrade treatment, type V and graded as shown on the plans, or as directed by the Engineer, in order to provide the subgrade width required for the proposed pavement section, including side slopes. Excavation and grading of the ballast and bed material shall include any cuts and fills necessary to account for erosion or degradation of the ballast in localized areas. Cuts and fills shall be balanced within sections approximately 300 feet in length along the profile of the pavement. The graded ballast and bed material shall be compacted in accordance with the applicable provisions of 203 prior to placement of the coarse aggregate No. 53. The 3 in. (75 mm) compacted aggregate as part of the Subgrade treatment type V shall be compacted to 100% prior to the placement of the pavement.*

SECTION 207, AFTER LINE 156, INSERT AS FOLLOWS:

*The cost of excavation and grading of existing railroad ballast and railroad bed material shall be included in the cost of subgrade treatment, type V.*

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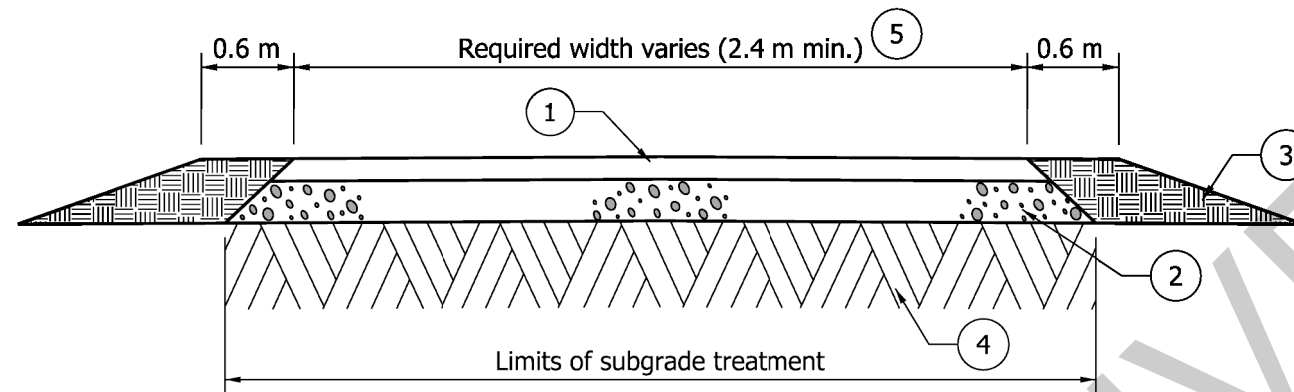
**LEGEND**

- ① 140 lb/yd<sup>2</sup> HMA Surface Type A, on  
220 lb/yd<sup>2</sup> HMA Intermediate, Type A
- ② 6 in. Compacted Aggregate No.53, Base
- ③ Earth Shoulder
- ④ Subgrade Treatment (6" Coarse Aggregate No.53)
- ⑤ Width and Cross Slope as required

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HMA NONMOTORIZED-VEHICLE-USE FACILITY  
PAVEMENT SECTION

07-01-10



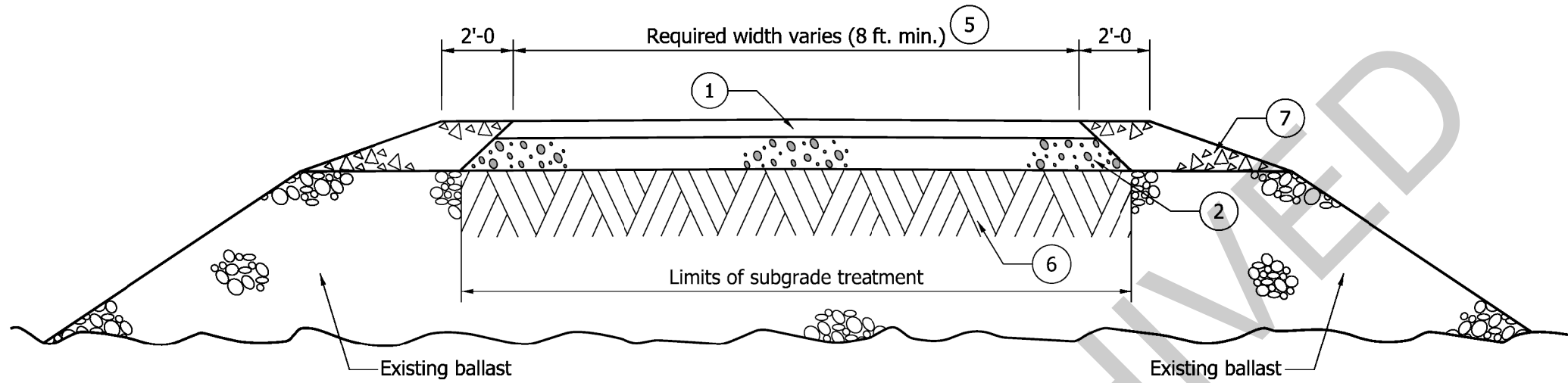
**LEGEND**

- ① 75 kg/m<sup>2</sup> HMA Surface Type A, on  
120 kg/m<sup>2</sup> HMA Intermediate, Type A
- ② 150 Compacted Aggregate No.53, Base
- ③ Earth Shoulder
- ④ Subgrade Treatment (150 Coarse Aggregate No.53)
- ⑤ Width and Cross Slope as required

All Dimensions are in mm unless otherwise specified.

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HMA NONMOTORIZED-VEHICLE-USE FACILITY  
PAVEMENT SECTION

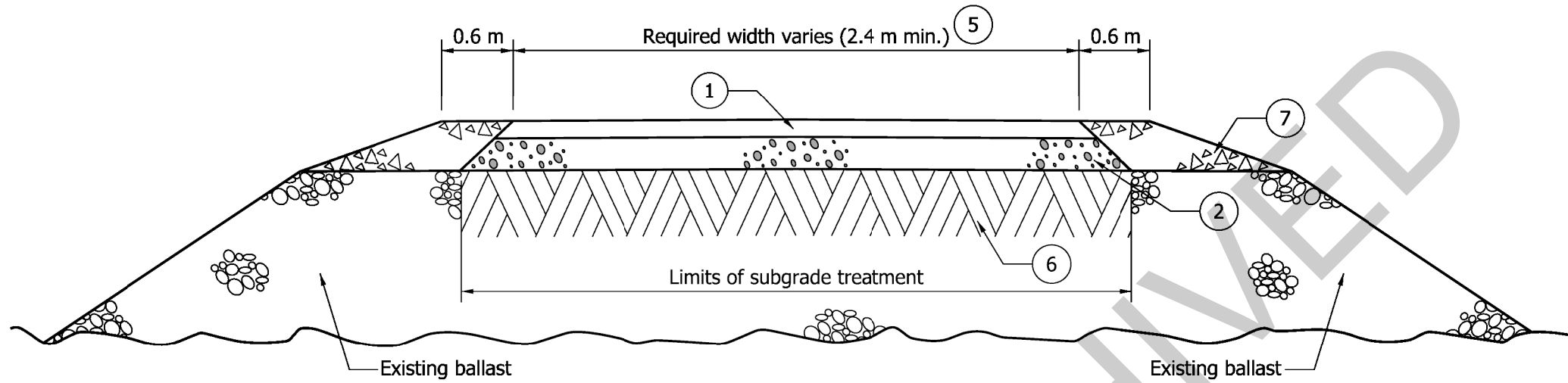


**LEGEND**

- ① 140 lb/yd<sup>2</sup> HMA Surface Type A, on 220 lb/yd<sup>2</sup> HMA Intermediate, Type A
- ② 6 in. Compacted Aggregate No. 53, Base
- ⑤ Width and Cross Slope as required
- ⑥ Subgrade treatment (3" subgrade excavated and replaced with 3" Coarse Aggregate No. 53)
- ⑦ Variable-Depth Compacted Aggregate Size No.53 or No.73

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HMA NONMOTORIZED-VEHICLE-USE FACILITY  
PAVEMENT SECTION  
ON ABANDONED-RAILROAD CORRIDOR



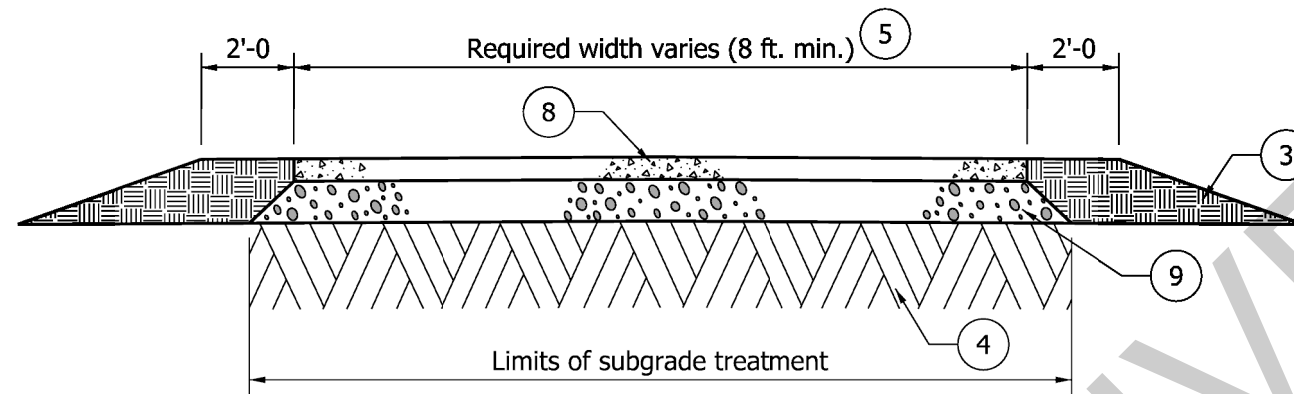
**LEGEND**

- ① 75 kg/m<sup>2</sup> HMA Surface Type A, on 120 kg/m<sup>2</sup> HMA Intermediate, Type A
- ② 150 Compacted Aggregate No. 53, Base
- ⑤ Width and Cross Slope as required
- ⑥ Subgrade treatment (75 subgrade excavated and replaced with 75 Coarse Aggregate No. 53)
- ⑦ Variable-Depth Compacted Aggregate Size No.53 or No.73

All Dimensions are in mm unless otherwise specified.

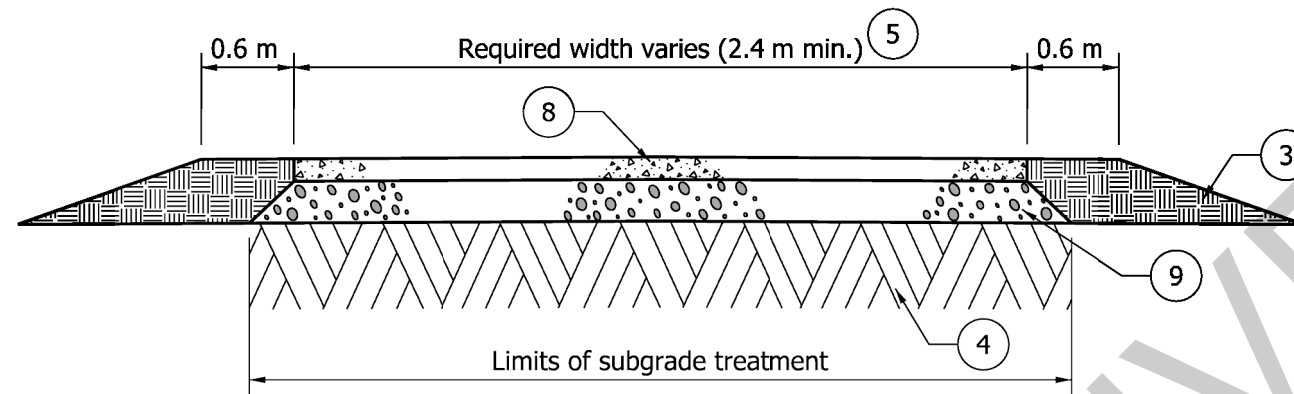
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HMA NONMOTORIZED-VEHICLE-USE FACILITY  
PAVEMENT SECTION  
ON ABANDONED-RAILROAD CORRIDOR



**LEGEND**

- ③ Earth Shoulder
- ④ Subgrade Treatment (6" Coarse Aggregate No.53)
- ⑤ Width and Cross Slope as required
- ⑧ 4 inches of PCCP with 1/8" saw cut Transverse Joint spaced at 8 feet without Dowel Bars
- ⑨ 4 in. compacted Aggregate No. 53, Base



**LEGEND**

- ③ Earth Shoulder
- ④ Subgrade Treatment (150 Coarse Aggregate No.53)
- ⑤ Width and Cross Slope as required
- ⑧ 100 of PCCP with 3 saw cut Transverse Joint spaced at 2.5 m without Dowel Bars
- ⑨ 100 compacted Aggregate No. 53, Base

All Dimensions are in mm unless otherwise specified.

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PCCP NONMOTORIZED-VEHICLE-USED FACILITY  
PAVEMENT SECTION