



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758 CM
Indianapolis, Indiana 46204

www.in.gov/indot

Mike Braun, Governor
Lyndsay Quist, Commissioner

FINAL DRAFT MINUTES

December 19, 2025, Standards Committee Meeting

(Changes to the Agenda by the Action of the Committee shown as highlighted yellow, including editorial revisions and changes to the First Draft Minutes based on comments received - highlighted green (see [page 7](#))).

January 8, 2026

TO: Standards Committee

FROM: Scott Trammell, Secretary

RE: Minutes of the **December 19** Standards Committee Meeting

The Standards Committee meeting was called to order by Mr. Pankow, Chair, at 09:03 a.m. on December 19 and was held virtually via *Teams* (Microsoft application). The meeting was adjourned at 09:23 a.m. The next meeting is scheduled for Thursday **January 15, 2026**.

The following committee members were in attendance:

Pankow, Gregory, Chairman, Director, Construction Management
Boruff, David Traffic Engineering
Koch, Mike, District Construction, Fort Wayne District
Novak, Joseph, Construction Management
Orton, Mark, Highway Engineering
Pelz, Kurt, Construction Technical Support
Rearick, Anne, Bridge Management
Reilman, Jim, Materials and Tests
Thomas, Matt*, Pavement Engineering
White, Peter, Bridge Engineering
*Proxy for Dave, Kumar

Also, the following attendees were present:

Awwad, Nathan E., INDOT
Blanchard, Jacob, INDOT
Clawson, Samuel G, INDOT
Delp, Patrick, INDOT
Duncan, Thomas, FHWA

Jacobs, David L, INDOT
John Susong, Rinker Pipe
Nelson, Mike, INDOT
Podorvanova, Lana, INDOT
Powell, Traci M, INDOT

Edward Waterfall, Rinker Pipe
Emmert, Rhonda, INDOT
Fox, Gary A, INDOT
Galetka, Jason, INDOT
Hailat, Mahmoud, INDOT

Ranck, Amanda, INDOT
Siddiki, Nayyar Zia, INDOT
Smith, Charles, INDOT
Thornton, Donald, INDOT
Trammell, Scott, INDOT

The following items were discussed:

A. GENERAL BUSINESS

OLD BUSINESS

(No items were listed)

NEW BUSINESS

Approval of the Minutes from the [November 19](#) meeting

Mr. Pankow requested a motion to approve the Minutes of the November 19, 2025, meeting.

Motion: Mr. Pelz
Second: Mr. Reilman
Ayes: 9
Nays: 0

ACTION:

PASSED AS SUBMITTED

B. CONCEPTUAL PROPOSAL

(No items were listed)

C. STANDARD SPECIFICATIONS, DRAWINGS, AND SPECIAL PROVISIONS PROPOSAL

OLD BUSINESS

[Item No. 2](#) [Mr. Reilman](#) [pg. 4](#)

2026 Standard Specifications:
SECTION 215

CHEMICAL MODIFICATION OF SOILS

ACTION:

PASSED AS SUBMITTED

NEW BUSINESS

[Item No. 1](#) [Mr. Reilman](#) [pg. 12](#)

2026 Standard Specifications:

COMMENTS AND ACTION

722.10 Placing and Finishing

722.12 Curing

904.01

904.08

Aggregates

Lightweight Aggregate

ACTION:

PASSED AS REVISED

Item No. 2Mr. Reilmanpg. 17

2026 Standard Specifications:

918.03

Geomembrane

ACTION:

PASSED AS SUBMITTED

Item No. 3Mr. Reilmanpg. 21

2026 Standard Specifications:

909.02(e)

Finish Coat for Weathering Steel *and Sound Barrier Posts*

Recurring Special Provision:

620-R-483

SOUND BARRIER SYSTEMS

ACTION:

PASSED AS SUBMITTED

cc: Committee Members
FHWA
ICI

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO 2026 STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Coal ash is no longer in use and minor editorial revisions are needed.

PROPOSED SOLUTION: The removal of coal ash along with some editorial changes.

APPLICABLE STANDARD SPECIFICATIONS: 215

APPLICABLE STANDARD DRAWING: None

APPLICABLE DESIGN MANUAL CHAPTER: None

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: Yes

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad Hoc committee consisting of Nayyar Siddiki, Samuel Clawson, and Jim Reilman

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE:

IMPACT ANALYSIS (attach report): Yes

Submitted By: Jim Reilman and Nayyar Siddiki

Title: State Material Engineer

Division: Materials and Test

E-mail: Jreilman@INDOT.IN.GOV

Date: 10/16/2025

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO 2026 STANDARD SPECIFICATIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No

Will approval of this item affect the Qualified Products List (QPL)? No

Will this proposal improve:

Construction costs? No

Construction time? N/A

Customer satisfaction? Yes

Congestion/travel time? N/A

Ride quality? N/A

Will this proposal reduce operational costs or maintenance effort? No

Will this item improve safety:

For motorists? No

For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? No

Design process? No

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? N/A

Can this item improve/reduce the number of potential change orders? No

Is this proposal needed for compliance with:

Federal or State regulations? N/A

AASHTO or other design code? N/A

Is this item editorial? Yes

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

REVISION TO 2026 STANDARD SPECIFICATIONS

SECTION 215 – CHEMICAL MODIFICATION OF SOILS

(Note: Proposed changes shown highlighted gray.)

The Standard Specifications are revised as follows:

SECTION 215, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 215 – CHEMICAL MODIFICATION OF SOILS

215.01 Description

This work shall consist of the modification of soils by uniformly mixing portland cement, ~~coal ash~~, or lime with soil to aid in strength gain and achieving the workability of soils.

MATERIALS

215.02 Materials

Materials shall be in accordance with the following:

Coal Ash, Class C	901.02
Lime	913.04(b)
Portland Cement, Type I <i>and Type II</i>	901.01(b)
Water	913.01

Note: Quicklime or portland cement may be used dry or as a slurry.

Soils for chemical modification shall meet the following requirements.

Soil Property	Test Method	Requirement
Maximum Dry Density	AASHTO T 99	≥ 90 pcf
Organic Material	AASHTO T 267	$\leq 6\%$
Sulfate Content	ITM 510	$\leq 1,000$ ppm

215.03 Testing and Mix Design

The Contractor shall be responsible for the mix design. The mix design shall be performed by a Qualified Geotechnical Consultant in accordance with the Department's Design Procedures for Soil Modification or Stabilization.

The quantities for hydrated lime, quicklime, or portland cement shall be based on 5.0% of the maximum dry density of the soils. The quantities for lime by-products shall be based on 6.0% of the maximum dry density of the soils. ~~The quantities for coal ash Class C shall be based on 12.0% of the maximum dry density of the soils. Class F coal ash shall not be used.~~

If hydrated lime, quick lime, lime by-products or portland cement are used, test results and the geotechnical consultant recommendations shall be submitted to the Engineer prior to use. ~~If coal ash is used, the test results and the geotechnical consultant recommendations shall be submitted to the Engineer and to the Department's Geotechnical Engineering Division for approval at least three business days prior to use.~~ If the modifier as bid is not appropriate for the soils encountered, portland cement shall be used. Portland cement, ~~coal ash~~, lime, and lime by-products

REVISION TO 2026 STANDARD SPECIFICATIONS

SECTION 215 – CHEMICAL MODIFICATION OF SOILS

shall be selected from the Department's QPLs of Cement Sources, Pozzolan Sources, and Soil Modifiers, respectively.

The quantity of chemical modifier may be adjusted for different soil types. ~~However, the source or type of chemical modifier shall not be changed during the progress of the work without approval. A change in source or type shall require a new mix design.~~

The source of a chemical modifier may be changed during the progress of the work provided the new source is from the QPL. A new mix design will not be required for changing the source of the chemical modifier.

If the type of chemical modifier is changed during the progress of the work, a new mix design shall be submitted for approval. ~~Changing portland~~ If the type of cement is changed from Type I to Type IL or from Type IL to Type I, ~~will~~ ~~shall require~~ a new mix design ~~to~~ ~~shall~~ be submitted for approval.

215.04 Storage and Handling

The chemical modifier shall be stored and handled in accordance with the manufacturer's recommendations.

215.05 Weather Limitations

The chemical soil modification shall be performed when the soil has a minimum temperature of 45°F, measured 4 in. below the surface, and with the air temperature rising. The chemical modifier shall not be mixed with frozen soils or with soil containing frost. Chemical soil modification shall only be performed in areas which are going to be paved during the same construction season.

215.06 Preparation of Soils

The soils shall be prepared in accordance with 207.03. All aggregates which are larger than approximately ~~3~~ ~~1~~ ~~1/2~~ in. encountered before or after mixing the soils and chemical modifiers shall be removed.

215.07 Spreading of Chemical Modifiers

Where Type A-6 or Type A-7 soils are used or encountered, the surface shall be scarified to the specified depth prior to distribution of the chemical modifier. The chemical modifier shall be distributed uniformly by a cyclone, screw-type, or pressure manifold type distributor. If a slurry is used, the surface shall be scarified prior to the distribution of the slurry. The chemical modifier shall not be applied when wind conditions create problems in adjacent areas or create a hazard to traffic on any adjacent roadway. The spreading of ~~the chemical modifier~~ ~~lime~~ shall be limited to an amount which can be incorporated into the soil within the same day of work. *When spreading cement, mixing and compaction shall occur before cementation takes place.* If weather causes stoppage of work or exposes the chemical modifier to washing or blowing, additional chemical modifier may be spread when the work resumes.

215.08 Mixing

The chemical modifier, soil, and water when necessary, shall be thoroughly mixed by rotary

REVISION TO 2026 STANDARD SPECIFICATIONS

SECTION 215 – CHEMICAL MODIFICATION OF SOILS

speed mixers. The mixing shall continue until a homogenous layer of the required thickness has been obtained. One hundred percent of the material, exclusive of rock particles, shall pass a 1 in. (25 mm) sieve and at least 60% shall pass a No. 4 (4.75 mm) sieve. The mixing depth shall be 14 in. The gradation test shall be performed in accordance with ITM 516.

The chemically modified soil mixture shall be at least 1% above the optimum moisture content during mixing and compaction. Water shall not be added to the chemically modified soil when the moisture content of the soil exceeds 3% above optimum moisture. Water shall be added during mixing only.

215.09 Compaction

Compaction of the mixture shall begin as soon as practicable after mixing and shall be in accordance with 207.03 as applicable. Compaction after mixing shall be as follows:

- (a) For portland cement modified soils, mixing shall be completed within 1 h of portland cement placement and grading and final compaction shall be completed within 3 h after mixing.

~~(b) Coal ash modified soils shall be compacted within 4 h.~~

- ~~(eb)~~ Lime modified soils shall be compacted within 24 h.

Acceptance of chemically modified soils will be determined in accordance with ITM 508 or ITM 509. *The frequency of LWD or DCP testing will be three tests for each 1,400 cu yds of chemically modified soils.* Testing of the chemically modified soils will begin a minimum of 24 h after compaction.

Acceptance of chemically modified soils will be determined by averaging three LWD tests obtained at random stations determined in accordance with ITM 802. The deflection shall be equal to or less than the allowable average deflection shown in the table below.

Material Type	Allowable Average Deflection, (mm)	Maximum Deflection at a Single Test Location (mm)
Cement Modified Soils	0.27	0.31
Lime Modified Soils	0.30	0.35

For measuring the compaction with a DCP, three random test locations will be determined in accordance with ITM 802. Blow counts of 15 and above will be used to determine the average for the top 6 in. of a 14 in. lift. Blow counts of 14 and above will be used to determine the average for the bottom 8 in. of a 14 in. lift. Blow counts of 18 and above will be used to determine the average for the 8 in. lift. Locations with test results less than the specified minimum blow counts will be retested and shall be reworked if the minimum blow count is not obtained. ~~The frequency of LWD or DCP testing will be three tests for each 1,400 cu yds of chemically modified soils.~~

The chemically modified soil lift shall meet the following requirements for compaction:

REVISION TO 2026 STANDARD SPECIFICATIONS

SECTION 215 – CHEMICAL MODIFICATION OF SOILS

- (a) The average DCP blow count shall not be less than 17 for the top 6 in. of a 14 in. lift.
- (b) The average DCP blow count shall not be less than 16 for the bottom 8 in. of a 14 in. lift.
- (c) Moisture tests for chemically modified soils mixture shall be performed in accordance with ITM 506 every 4 h during chemical and soils mixing.
- (d) One gradation test shall be performed for each 2,500 cu yds of chemically modified soil in accordance with 215.08 and ITM 516.

Construction traffic or equipment will not be allowed on the treated soils until the soil meets the compaction test requirements.

215.10 Curing

Moisture content shall be maintained at *least* 1% above the optimum moisture content ~~for the first 48 h after~~during mixing.

215.11 Proofrolling

Proofrolling shall be performed in accordance with 203.26.

215.12 Method of Measurement

The accepted quantity of chemically modified soils, for the material specified, will be measured by the square yard, complete in place. All removal and replacement required to modify the soils below the specified depth will be measured in accordance with 203.27(b).

215.13 Basis of Payment

The accepted quantity of chemically modified soils, for the material specified, will be paid for by the square yard, complete in place.

~~Coal ash, when used, will be paid for as lime.~~

All removal and replacement required to modify the soils below the specified depth will be paid for in accordance with 203.28.

Adjustment of materials for chemical modification that exceeds the limits of 215.03 will be included in a change order for materials only and paid for as chemical modifier adjustments. If mix design test results show that the chemical modifier as bid by the Contractor is not appropriate and the strength of the modified soil can not be achieved, a price adjustment will be made for the use of portland cement. The price adjustment will be calculated at a cost equal to the difference in the invoice cost of the chemical modifier found to be appropriate for use and the invoice or quoted delivered cost of the chemical modifier as bid by the Contractor. This adjustment will be included in a change order and will be paid for as chemical modifier adjustments. ~~Coal ash will not be~~

REVISION TO 2026 STANDARD SPECIFICATIONS
SECTION 215 – CHEMICAL MODIFICATION OF SOILS

~~considered for price adjustment.~~ Payment for chemical modifier adjustments will be made for direct delivered material costs incurred by the Contractor in accordance with 109.05.

Payment will be made under:

Pay Item	Pay Unit Symbol
Chemical Modification, Soils, _____ material	SYS

The cost of performing the laboratory tests, providing a qualified geotechnical consultant, scarification of the soil, spreading and mixing of the chemical modifier and soil, compaction of the resultant mixture, shaping the soil, work required due to adjustments of modifier proportioning, additional modification required due to weather conditions, correction of deficient areas, water required for the modification process, modified soil trimming, moisture testing, gradation testing, proofrolling, and all operations needed to meet the requirements of this specification shall be included in the cost of the pay items of this section.

COMMENTS AND ACTION

SECTION 215 – CHEMICAL MODIFICATION OF SOILS

DISCUSSION:

Mr. Reilman introduced and presented this item stating that coal ash is no longer in use and minor editorial revisions are needed.

Mr. Reilman proposed the removal of all mentions of coal ash along with some other editorial changes for clarification.

Without any further discussion this item passed as submitted.

Motion: Mr. Reilman Second: Mr. Novak Ayes: 9 Nays: 0 FHWA Approval: YES	Action: ☒ Passed as Submitted ☐ Passed as Revised ☐ Withdrawn
2026 Standard Specifications Sections: Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	☒ 2028 Standard Specifications ☐ Revise Pay Items List ☐ Notification to Designers if change is <u>not</u> addressed by RSP ☒ Create RSP (No. 215-R-814) Effective: June 1, 2026 ☐ Revise RSP (No. __) Effective: ☐ Standard Drawing Effective: ☐ Create RPD (No. __) Effective: ☐ GIFE Update ☐ Frequency Manual Update ☐ AWP Update

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO 2026 STANDARD SPECIFICATIONS

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: When soft, weak, or peat soils are encountered lightweight aggregates are sometimes used. Material specifications need to be created.

PROPOSED SOLUTION: Create material specifications for lightweight aggregates.

APPLICABLE STANDARD SPECIFICATIONS: None

APPLICABLE STANDARD DRAWING: No

APPLICABLE DESIGN MANUAL CHAPTER: No

APPLICABLE SECTION OF GIFE: No

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: Create new 904.08 RSP

PAY ITEMS AFFECTED: No

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad Hoc committee consisting of Nayyar Siddiki and Samuel Clawson

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: As required by the project's Geotechnical Report.

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman and Nayyar Siddiki

Title: State Material Engineer

Division: Materials and Test

E-mail: Jreilman@INDOT.IN.GOV

Date: 10/30/2025

STANDARD SPECIFICATIONS, SPECIAL PROVISIONS AND STANDARD DRAWINGS

REVISION TO 2026 STANDARD SPECIFICATIONS

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? N/A

Will approval of this item affect the Qualified Products List (QPL)? Yes

Will this proposal improve:

Construction costs? Yes

Construction time? Yes

Customer satisfaction? Yes

Congestion/travel time? N/A

Ride quality? Yes

Will this proposal reduce operational costs or maintenance effort? Yes

Will this item improve safety:

For motorists? N/A

For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? Yes

Design process? N/A

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? N/A

AASHTO or other design code? N/A

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

REVISION TO 2026 STANDARD SPECIFICATIONS

SECTION 904 – AGGREGATES

904.01 Aggregates

904.08 Lightweight Aggregate (proposed new)

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 904, BEGIN LINE 24, DELETE AND INSERT AS FOLLOWS:

Aggregates, except those used for precast concrete units, ~~or~~ fine aggregates used for snow and ice abrasive, *or lightweight aggregates used in geotechnical applications*, shall be supplied by a Certified Aggregate Producer in accordance with 917. Structure backfill may be obtained from a non-CAPP source in accordance with 211.02. SF for SMA mixtures shall also require the following:

SECTION 904, AFTER LINE 438, INSERT AS FOLLOWS:

904.08 Lightweight Aggregate

Lightweight aggregates, LWA, in this specification are for use in geotechnical applications only. LWA shall consist of expanded shale or foamed glass manufactured materials. All lightweight aggregates shall be selected from the Department's QPL of Lightweight Aggregates.

(a) Expanded Shale

Expanded shale shall be the manufactured product resulting from adding shale and clay into a rotary kiln and subjecting them to heat. The material shall meet the following requirements in accordance with AASHTO T 27:

<i>Sieve Sizes</i>	<i>Percent Passing</i>
<i>1 1/2 in. (37.5 mm)</i>	<i>100</i>
<i>1 in. (25 mm)</i>	<i>90 - 100</i>
<i>3/4 in. (19 mm)</i>	<i>70 - 100</i>
<i>1/2 in. (12.5 mm)</i>	<i>30 - 100</i>
<i>3/8 in. (9.5 mm)</i>	<i>20 - 95</i>
<i>No. 4 (4.75 mm)</i>	<i>0 - 40</i>
<i>No. 30 (600 µm)</i>	<i>0 - 5</i>

<i>Absorption</i>	<i>Maximum By Weight</i>
<i>Above Water Table</i>	<i>25%</i>
<i>Below Water Table</i>	<i>34%</i>

Expanded Shale shall have a bulk density ranging from 30 to 65 pcf in accordance with AASHTO T 19.

(b) Foamed Glass Aggregate

Foamed glass aggregate, FGA, shall have a closed cell structure, be made from of a minimum of 98% recycled glass using a dry foaming process, and be non-leaching. The gradation of FGA shall meet the requirements of AASHTO T 27 as shown in the table below:

REVISION TO 2026 STANDARD SPECIFICATIONS

SECTION 904 – AGGREGATES

904.01 Aggregates

904.08 Lightweight Aggregate (proposed new)

<i>Sieve Size</i>	<i>Percent Passing</i>
<i>4 in. (100 mm)</i>	<i>100</i>
<i>2 1/2 in. (63 mm)</i>	<i>85 - 100</i>
<i>3/8 in. (9.5 mm)</i>	<i>0 - 15</i>

The soundness of the FGA shall be tested in accordance with AASHTO T 104 and shall not exceed the values listed:

<i>Soundness</i>	<i>Loss (%)</i>
<i>Magnesium Sulfate (AASHTO T 104)</i>	<i>≤ 14</i>
<i>Sodium Sulfate (AASHTO T 104)</i>	<i>< 7</i>

FGA shall have a unit weight ranging from 10 to 15 pcf in accordance with AASHTO T 19. FGA compacted in-place shall not have a unit weight greater than or equal to 25 pcf. Water absorption of the FGA shall be between 30% to 60% by weight after soaking for 28 days.

(c) Electrochemical Properties of Lightweight Aggregates

Both expanded shale aggregates and FGA shall meet the following electrochemical requirements:

<i>Property</i>	<i>Requirement</i>	<i>Method</i>
<i>Chloride</i>	<i>< 100 ppm</i>	<i>AASHTO T 291</i>
<i>Organic Content</i>	<i>< 1%</i>	<i>AASHTO T 267</i>
<i>pH</i>	<i>5 - 10</i>	<i>AASHTO T 289</i>
<i>Resistivity</i>	<i>≥ 3,000 ohm-cm</i>	<i>AASHTO T 288</i>
<i>Sulfate</i>	<i>< 200 ppm</i>	<i>AASHTO T 290</i>

COMMENTS AND ACTION

904.01 Aggregates

904.08 Lightweight Aggregate (*proposed new*)

DISCUSSION:

This item was introduced and presented by Mr. Reilman who mentioned that when soft, weak, or peat soils are encountered, lightweight aggregates are sometimes used. Material specifications need to be created.

Mr. Reilman proposed to create material specifications for lightweight aggregates.

Further revisions are as shown for clarification.

Mr. Reilman revised his motion which was seconded by Mr. Koch.

Without any further discussion this item passed as revised.

Motion: Mr. Reilman Second: Mr. Koch Ayes: 9 Nays: 0 FHWA Approval: YES	Action: ☐ Passed as Submitted ☒ Passed as Revised ☐ Withdrawn
2026 Standard Specifications Sections: 904.08 (proposed new) Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	☒ 2028 Standard Specifications ☐ Revise Pay Items List ☐ Notification to Designers if change is <u>not</u> addressed by RSP ☒ Create RSP (No. 904-M-076) Effective: June 1, 2026 ☐ Revise RSP (No.____) Effective: ☐ Standard Drawing Effective: ☐ Create RPD (No. ____) Effective: ☐ GIFE Update ☒ Frequency Manual Update ☒ AWP Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: We are wanting to add a new category of Geomembrane and several test methods needed revising.

PROPOSED SOLUTION: Changed the Geomembrane table and turned it into a Type 1A and Type 1B and revised some tests.

APPLICABLE STANDARD SPECIFICATIONS: Yes

APPLICABLE STANDARD DRAWING: No

APPLICABLE DESIGN MANUAL CHAPTER: No

APPLICABLE SECTION OF GIFE: No

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: Yes

PAY ITEMS AFFECTED: Yes

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad Hoc committee consisting of Nayyar Siddiki and Samuel Clawson

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: N/A

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman and Nayyar Siddiki

Title: State Material Engineer

Division: Materials and Test

E-mail: Jreilman@INDOT.IN.GOV

Date: 12/1/2025

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No

Will approval of this item affect the Qualified Products List (QPL)? Yes

Will this proposal improve:

Construction costs? N/A

Construction time? N/A

Customer satisfaction? Yes

Congestion/travel time? N/A

Ride quality? Yes

Will this proposal reduce operational costs or maintenance effort? Yes

Will this item improve safety:

For motorists? Yes

For construction workers? Yes

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? Yes

Design process? N/A

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? Yes

Is this proposal needed for compliance with:

Federal or State regulations? N/A

AASHTO or other design code? N/A

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

REVISION TO 2026 STANDARD SPECIFICATIONS

SECTION 918 – GEOSYNTHETIC MATERIALS

918.03 Geomembrane

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 918, BEGIN LINE 51, DELETE AND INSERT AS FOLLOWS:

918.03 Geomembrane

This material shall consist of a geomembrane fabricated from HDPE consisting of strong, rot resistant, chemically stable long-chain synthetic polymer materials, dimensionally stable with distinct and measurable openings. The manufacturer shall submit the tests for the intended use to the Geotechnical Engineering Division.

The geomembrane shall meet the following requirements:

Test	Method	Requirements	
		Type 1A	Type 1B
Density @ 23°C, <i>min.</i>	ASTM D1505	0.88 g/cm ³ , minimum	0.93 g/cm ³
Sheet Thickness, <i>min.</i>	ASTM D5199	0.75 mm (30 mils)	1.0 mm (40 mils)
Carbon Black, <i>min.</i>	ASTM D4218	2%	2%
Tear Resistance, <i>min.</i>	ASTM D1004	9893 N (21 lbs)	98 N (22 lbs)
Tensile Properties, Strength Yield	ASTM D6693	66 lbs/in.	88 lbs/in.
Resistance to Soil Burial	ASTM D6134	minimum of 90% of original value retained	
pH	AASHTO T 289	Durability between 3 to 12	
Roll Width	Calibered	2022 ft	22 ft
Note: Geomembranes shall resist long-term contact with soils in the range of pH 3 to 12			

COMMENTS AND ACTION

918.03 Geomembrane

DISCUSSION:

Mr. Reilman introduced and presented this item expressing the need to add a new type of Geomembrane, along with several test methods that need revising.

Mr. Reilman proposed to revise the Geomembrane table to reflect Type 1A and Type 1B requirements, and revise some tests.

Without further discussion this item passed as submitted.

Motion: Mr. Reilman Second: Mr. Koch Ayes: 9 Nays: 0 FHWA Approval: YES	Action: ☒ Passed as Submitted ☐ Passed as Revised ☐ Withdrawn
2026 Standard Specifications Sections: 918.03 pg. 1157. Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	☒ 2028 Standard Specifications ☐ Revise Pay Items List ☐ Notification to Designers if change is <u>not</u> addressed by RSP ☒ Create RSP (No. 918-M-077) Effective: June 1, 2026 ☐ Revise RSP (No.____) Effective: ☐ Standard Drawing Effective: ☐ Create RPD (No.____) Effective: ☐ GIFE Update ☐ Frequency Manual Update ☒ AWP Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Coating specifications for sound barrier post paint need to be adjusted to provide more products.

PROPOSED SOLUTION: Incorporate the proposed edits and clarification to 909 and the sound barrier RSP.

APPLICABLE STANDARD SPECIFICATIONS: 909.02

APPLICABLE STANDARD DRAWINGS: None

APPLICABLE DESIGN MANUAL SECTION: None

APPLICABLE SECTION OF GIFE: None

APPLICABLE RECURRING SPECIAL PROVISIONS: RSP 620-R-483

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc: Kelly Cummins, Jim Reilman

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: all contracts with a 619, 711, or 620 pay item.

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 12/4/25

IMPACT ANALYSIS REPORT CHECKLIST

Explain the business case as to why this item should be presented to the Standards Committee for approval. Answer the following questions with Yes, No or N/A.

Does this item appear in any other specification sections? No

Will approval of this item affect the Approved Materials List? No

Will this proposal improve:

Construction costs? N/A

Construction time? N/A

Customer satisfaction? Yes

Congestion/travel time? N/A

Ride quality? N/A

Will this proposal reduce operational costs or maintenance effort? N/A

Will this item improve safety:

For motorists? N/A

For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? Yes

Asset preservation? N/A

Design process? N/A

Will this change provide the contractor more flexibility? Yes

Will this proposal provide clarification for the Contractor and field personnel? Yes

Can this item improve/reduce the number of potential change orders? N/A

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

Provide any further information as to why this proposal should be placed on the Standards Committee meeting Agenda:

REVISION TO 2026 STANDARD SPECIFICATIONS AND RECURRING SPECIAL PROVISION

SECTION 909 – COATINGS, PAINTS, AND LIQUID EPOXY

909.02(e) Finish Coat for Weathering Steel

620-R-483 SOUND BARRIER SYSTEMS

(Note: Proposed changes shown highlighted gray.
Changed shown highlighted yellow were sent out by Mr. Reilman
to all Standards Committee members before the meeting for review and comments)

The Standard Specifications are revised as follows:

SECTION 909, BEGIN LINE 213, DELETE AND INSERT AS FOLLOWS:

(e) Finish Coat for Weathering Steel and Sound Barrier Posts

The finish coat shall be an aliphatic polyurethane or a waterborne acrylic coating, and the color of the dried film shall match color No. 20045 of SAE AMS-STD-595. It shall be suitable for use as a finish coat over an epoxy intermediate coating. The mixed coating shall be in accordance with the following requirements: *meeting the material properties listed below.*

For an aliphatic polyurethane coating:

Specular gloss, 60°, 10 ±0.5 mils wet film thickness on
a tin coated steel panel, dried 48 h, ASTM D523, max. 30
Total solids, % by weight, ASTM D2369, min. 60
Weight/volume, ASTM D1475, 25°C, min. 1.200 kg/L

For a waterborne acrylic coating:

Specular gloss, 60°, 10 ±0.5 mils wet film thickness on
a tin coated steel panel, dried 48 h, ASTM D523, max. 30
Total solids, % by weight, ASTM D2369, min. 48
Weight/volume, ASTM D1475, 25°C, min. 1.200 kg/L

1. Finish Coat for Weathering Steel

#This finish coat shall be suitable for use as a finish coat over an epoxy intermediate coating. The color of the dried film shall match color No. 20045 of SAE-AMS-STD-595.

2. Finish Coat for Sound Barrier Posts

#This finish coat shall be suitable for use as a finish coat over either an epoxy intermediate coating or an organic zinc primer coating. The finish coat shall be selected from the Department's QPL of Coating Formulations. The color of the dried film shall be as directed by the Engineer.

3. Material Properties

Material properties for each of the coatings shall be in accordance with the following requirements.

a. Aliphatic Polyurethane Coating

Specular gloss, 60°, 10 ±0.5 mils wet film thickness on
a tin coated steel panel, dried 48 h, ASTM D523, max. 30
Total solids, % by weight, ASTM D2369, min. 60
Weight/volume, ASTM D1475, 25°C, min. 1.200 kg/L

REVISION TO 2026 STANDARD SPECIFICATIONS AND RECURRING SPECIAL PROVISION

SECTION 909 – COATINGS, PAINTS, AND LIQUID EPOXY

909.02(e) Finish Coat for Weathering Steel

620-R-483 SOUND BARRIER SYSTEMS

b. Waterborne Acrylic Coating

Specular gloss, 60°, 10 ±0.5 mils wet film thickness on a tin coated steel panel, dried 48 h, ASTM D523, max.	30
Total solids, % by weight, ASTM D2369, min.	3040
Weight/volume, ASTM D1475, 25°C, min.	1.200 kg/L

Note: Only affected section of RSP 620-R-483 SOUND BARRIER SYSTEMS shown.

Currently used full version of this RSP available at:

<https://www.in.gov/dot/div/contracts/standards/rsp/sep25/sec600.htm>

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620.04 Materials

Materials shall be in accordance with the following:

Cast-in-Place Portland Cement Concrete, Class A	702
Coarse Aggregate, Class A or Higher, Size No. 91	904.03
Coarse Aggregate, Class D or Higher, Size No. 2	904.03
Concrete Masonry Units	905.06
Fine Aggregate, Size No. 23	904.02
Joint Mortar	901.08, 907.12
Coatings for Metal	909.02
Portland Cement	901.01(b)
Precast Concrete	707
Reinforcing Bars	910.01
Structural Aluminum Posts	910.14(d)
Structural Steel	910
Water	913.01

~~Structural steel components shall be hot dipped galvanized in accordance with ASTM A123, coating grade 100 or painted with a coating in accordance with 619.11 and 619.12 with the exception that the finish coat shall be a waterborne acrylic coating in one of the colors listed below and otherwise in accordance with 909.02(e).~~

~~Exposed surfaces of galvanized components shall be prepared using a light brush off blast cleaning in accordance with SSPC-SP16. The surface profile shall be 15 to 30 microns in accordance with ASTM D4417, prior to coating. The coating shall be in accordance with 619.09(b), 909.02, and the following.~~

~~In lieu of the properties listed in 909.02(d)3, the waterborne finish coat mixed coating properties shall be in accordance with the following requirements.~~

REVISION TO 2026 STANDARD SPECIFICATIONS AND RECURRING SPECIAL PROVISION

SECTION 909 – COATINGS, PAINTS, AND LIQUID EPOXY

909.02(e) Finish Coat for Weathering Steel

620-R-483 SOUND BARRIER SYSTEMS

Weight/volume, ASTM D1475, 25°C, min.....	1.200 kg/L
Total solids, % by weight, ASTM D2369, min.....	48
Volatile organic compounds, ASTM D3960, max.....	180 g/L
Specular gloss, 60°, 10 ±0.5 mils wet film thickness on a	
tin coated steel panel, dried 48 h, ASTM D523, max.	25

Structural steel components shall be either ~~bare~~uncoated steel or galvanized steel. All coating system components shall be from the same manufacturer, and the color of the finish coat shall be one of the colors listed below, as directed by the Engineer.

When ~~non-galvanized structural~~uncoated steel components are provided, they shall be coated with the structural steel coating system in accordance with 619.09(a), 619.11, and 619.12, with the exception that the finish coat shall be a sound barrier post coating from the Department's QPL of Coating Formulations and in accordance with 909.02(e)2. ~~The color of the finish coat shall be one of the colors listed below as directed by the Engineer.~~

When galvanized ~~structural~~ steel components are provided, they shall be hot dipped in accordance with ASTM A123, coating grade 100, and then coated in accordance with 619.09(b) with the exception that the finish coat shall be a sound barrier post coating from the Department's QPL of Coating Formulations and in accordance with 909.02(e)2. Exposed surfaces of galvanized components shall be prepared using a light brush-off blast cleaning in accordance with SSPC-SP16. The surface profile shall be 15 to 30 microns in accordance with ASTM D4417, prior to coating. ~~The coating system shall consist of an organic zinc primer and a sound barrier post coating from the Department's QPL of Coating Formulations. The finish coat shall also be in accordance with 909.02(e)2. The color of the finish coat shall be one of the colors listed below as directed by the Engineer.~~

The color of the dried film shall match the color of the sound barrier panels:

- (a) light gray (SAE-AMS-STD-595, color No. 26492),
 - (b) light brown (SAE-AMS-STD-595, color No. 20450),
 - (c) light tan (SAE-AMS-STD-595, color No. 27769),
- unless otherwise shown on the plans.

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COMMENTS AND ACTION

909.02(e) Finish Coat for Weathering Steel
 620-R-483 SOUND BARRIER SYSTEMS

DISCUSSION:

This item was introduced and presented by Mr. Reilman who stated that coating specifications for sound barrier post paint needs to be adjusted to allow the use of more products.

Mr. Reilman proposed to incorporate the proposed edits and clarification to 909 and the sound barrier RSP. Further editorial revisions were incorporated, as shown, to be more specific and provide clarification, in response to comments received prior to the meeting.

This item passed as submitted. Revisions shown highlighted **yellow** were sent out by J. Reilman to all members for review and comments before this meeting.

Motion: Mr. Reilman Second: Mr. White Ayes: 9 Nays: 0 FHWA Approval: YES	Action: ☒ Passed as Submitted ☐ Passed as Revised ☐ Withdrawn
2026 Standard Specifications Sections: 909.02(e) pg. 1062. Recurring Special Provisions or Plan Details: 620-R-483 SOUND BARRIER SYSTEMS Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	☒ 2028 Standard Specifications ☐ Revise Pay Items List ☐ Notification to Designers if change is <u>not</u> addressed by RSP ☒ Create RSP (No. 909-M-078) Effective: June 1, 2026 ☒ Revise RSP (No. 620-R-483) Effective: June 1, 2026 ☐ Standard Drawing Effective: ☐ Create RPD (No. <u> </u>) Effective: ☐ GIFE Update ☒ Frequency Manual Update ☒ AWP Update