INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758 CM
Indianapolis, Indiana 46204

www.in.gov/indot

Mike Braun, Governor
Lyndsay Quist, Commissioner

APPROVED MINUTES

June 19, 2025, Standards Committee Meeting

July 24, 2025

TO: Standards Committee

FROM: Scott Trammell, Secretary

RE: Minutes from the June 19, 2025, Standards Committee Meeting

The June Standards Committee meeting was called to order by Mr. Pankow, Chair, at 09:00 a.m. on Thursday, June 19, and was held virtually via *Teams* (Microsoft application). The meeting was adjourned at 10:13 a.m. The next Standards Committee meeting is scheduled for **July 17**, 2025.

The following committee members were in attendance:

Pankow, Gregory, Chairman, Director, Construction Management
Bruno, Joseph*, Traffic Engineering
Cosenza, Nick**, Pavement 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
White, Peter, Bridge Engineering
Wooden, John, Contract Administration
**Proxy* for Boruff, David
***Proxy* for Dave, Kumar

Also, the following attendees with their different participation duration were captured by Microsoft Teams:

Awwad, Nathan, INDOT
Blanchard, Jacob, INDOT
Connoly, Richard, guest
Couch, Gregory, INDOT
Cruz, Elena, INDOT
Delp, Patrick, INDOT
Lesh, Jim, INDOT
Mouser, Elizabeth, INDOT
Nelson, Brian, guest
Nunley, Cindy E. INDOT
Osborn, Dan, ICI
Pastuszka, Elizabeth, guest

Duncan, Steve, INDOT
Duncan, Thomas, FHWA
Eichhorst, Jessica, guest
Emmert, Rhonda, INDOT
Feutz, Douglas, INDOT
Fisher, Steve, INDOT
Gentry, Christopher, INDOT
Hailat, Mahmoud, INDOT
Hanny, Aaron, INDOT
Harris, Tom, INDOT
Hauser, Derrick, INDOT
Jacobs, David L., INDOT
Podorvanova, Lana, INDOT
Powell, Traci, INDOT
Rank, Amanda, INDOT
Russell, Melissa, INDOT
Sharp, Matthew, guest
Shi, Runfa, INDOT
Smart, Steve, County Materials
Thornton, Donald, INDOT
Trammell, Scott, INDOT
Wagner, Stephanie, INDOT
Wortkoetter, Andrew J., INDOT
Wren, Rachel, INDOT

The following items were discussed:

A. GENERAL BUSINESS

OLD BUSINESS *(No items were listed)*

NEW BUSINESS

Approval of the Minutes from the May 15, 2025 meeting.

Mr. Pankow requested a motion to approve the Minutes of the May 15, 2025 meeting.

Motion: Mr. Pelz
Second: Mr. Reilman
Ayes: 10
Nays: 0

ACTION: PASSED AS SUBMITTED

B. CONCEPTUAL PROPOSAL

(No items were listed)

C. STANDARD SPECIFICATIONS, DRAWINGS, and SPECIAL PROVISIONS PROPOSAL

OLD BUSINESS *(No items were listed)*

NEW BUSINESS

Item No. 1 — Mr. Novak — pg. 4

Standard Specifications:

SECTION 626 – ~~BLANK~~*POST-CONSTRUCTION STORMWATER MANAGEMENT*

ACTION: PASSED AS REVISED

Item No. 2	Mr. Boruff	pg. 16

Recurring Special Provision:

617-T-213	HIGH FRICTION SURFACE TREATMENT
ACTION:	PASSED AS REVISED

Item No. 3	Mr. White	pg. 27

Standard Specifications:

714.06	Precast Concrete Headwalls, Wingwalls, and Footings
723.11	Placement of Structure Sections and Wingwalls
ACTION:	PASSED AS SUBMITTED

Item No. 4	Mr. Pelz	pg. 32

Recurring Special Provision:

xxx-x-xxx	*STATION LATH (proposed new)*
ACTION:	PASSED AS REVISED

Item No. 5	Mr. Novak	pg. 36

Recurring Special Provision:

205-B-XXX	*TEMPORARY CAUSEWAY (proposed new)*

Standard Drawings *(proposed new)*:

E 205-XXXX-01	*TEMPORARY CAUSEWAY INDEX AND GENERAL NOTES*
E 205-XXXX-02	*TEMPORARY CAUSEWAY IN STREAM FORD*
E 205-XXXX-03	*TEMPORARY CAUSEWAY IN STREAM CULVERTS*
E 205-XXXX-04	*TEMPORARY CAUSEWAY SPAN*
ACTION:	PASSED AS REVISED

cc: Committee Members
FHWA
ICI

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Post-Construction Stormwater Best Management Practices (PCBMP) are a requirement under the Construction Stormwater General Permit. INDOT does not have established construction specifications to support PCBMPs. A Recurring Special Provision will offer general guidance to design and construction of PCSWMs. It would help fill in the gaps and provide clearer direction for successful implementation of PCBMPs.

PROPOSED SOLUTION: Create an RSP adding Section 626 for PCSM.

APPLICABLE STANDARD SPECIFICATIONS: New 626 section

APPLICABLE STANDARD DRAWING: None. Design will be guided by a library of design templates. PCBMPs will be shown on the plans according to design guidance.

APPLICABLE DESIGN MANUAL CHAPTER: 203-5 and 204

APPLICABLE SECTION OF GIFE: 3, 4, 20

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: N/A

PAY ITEMS AFFECTED: There are existing items for PCBMP pipe, PCBMP riser pipe, and PCBMP outlet pipe. Create new items for No. 2 Filter Stone, Stormwater Treatment Unit and Trash Rack.

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc group including members from INDOT Environmental Services, INDOT Design, HNTB led by Jessica Eichhorst, and Tom Harris Construction Management.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Contracts with a PCBMP requirement.

IMPACT ANALYSIS (attach report): Yes

Submitted By: Joe Novak

Title: State Construction Engineer

Division: Construction Management

E-mail: jnovak@indot.in.gov

Date: 5/22/25

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 Qualified Products List (QPL)? Yes
Will this proposal improve:

Construction costs? Yes
Construction time? Yes
Customer satisfaction? No
Congestion/travel time? No
Ride quality? No

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? Yes
Design process? No

Will this change provide the contractor more flexibility? No

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? Yes
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:

The Standard Specifications are revised as follows:

SECTION 626, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 626 – ~~BLANK~~*POST-CONSTRUCTION STORMWATER MANAGEMENT*

626.01 Description

This work shall consist of furnishing and installing permanent stormwater Post-Construction Best Management Practices, PCBMP, in accordance with the MS4 General Permit and the Construction Stormwater General Permit, CSGP, and in accordance with 105.03.

MATERIALS

626.02 Materials

Materials shall be in accordance with the following:

Castings	*720*
Coarse Aggregate, Class F or Higher	*904.03*
Concrete, Class A	*702*
Geotextile for Riprap	*918.02(a)*
Geotextile for Underdrains	*918.02(b)*
Inlets	*720*
Metal End Sections	*908.06*
Riprap	*616*
Structural Backfill	*904.05*

Filter stone shall consist of No. 2 stone in accordance with 904.

PCBMP pipe, riser pipe and outlet pipe shall be profile wall PVC in accordance with 715.02(b) and 907.22. PCBMP pipe and riser pipe shall be perforated.

CONSTRUCTION REQUIREMENTS

626.03 General Requirements

(a) Post-Construction Best Management Practices

PCBMPs shall be as shown on the plans. Any deviations from the planned installation shall be submitted for review and approval to the Engineer and to the Department's Post-Construction Stormwater Management Team at least 14 days prior to installation. Revised design calculations, signed by the professional engineer, shall be provided for all design changes made during the construction of the PCBMP.

A temporary BMP installed and then used as a permanent PCBMP shall be restored or modified to be in accordance with the PCBMP shown on the plans.

(b) Seeding and Sodding

Seeding and sodding shall be constructed as shown on the plans and in accordance with 621. Turf grass seeding shall be in accordance with 621.06(a) in rural areas and 621.06(b) in urban areas. Where specified, seed mixtures for floodplains shall be in accordance with 621.06(e) unless otherwise specified on the plans.

626.04 Dry Turf Grass Swales and Dry Native Grass Swales

(a) Construction

Earthwork shall be as on the plans. Ditch excavation and grading shall be constructed as shown on the plans and in accordance with 203 and finished in accordance with 208. Soil compaction within the limits of the swale bottom shall be minimized.

(b) Check Dam, Permanent

Permanent check dams shall be composed of revetment riprap and constructed as shown on the plans. The revetment riprap shall be keyed in 18 in. below the flowline elevation. Revetment riprap shall not be placed on geotextiles.

(c) Seeding and Sodding

Seeding and sodding shall be in accordance with 626.03(b).

626.05 Vegetated Turf Grass Filter Strips and Vegetated Native Grass Filter Strips

(a) Construction

Earthwork shall be as shown on the plans. Excavation and grading shall be constructed as shown on the plans and in accordance with 203 and finished in accordance with 208. Soil compaction within the limits of the vegetated filter strip shall be minimized.

(b) Level Spreaders

Level spreaders shall be constructed as shown on the plans and shall remain level. The lip of the level spreader on the downslope sides shall be at least 3 in. higher than existing grade and constructed of Class A concrete.

626.06 Dry Detention

(a) Construction

Dry detention consists of dry detention ponds and dry detention swales. Dry detention, pilot channels, and swale block excavating and grading shall be constructed as shown on the plans and in accordance with 203 and finished in accordance with 208. Soil compaction within the limits of the dry detention bottom shall be minimized.

(b) Stone Trench Underdrain

Stone trench underdrain shall be constructed as shown on the plans. If the stone trench underdrain is constructed before the area draining to the stone trench underdrain is permanently

stabilized with vegetative cover at 70% density, the stone trench underdrain shall be protected from sediment in accordance with 205.05(i).

The trench sides and bottom shall be lined with geotextile for underdrains in accordance with 918.02(b). No geotextile shall be placed on the upper surface of the stone trench underdrain.

PCBMP pipe and riser pipe shall be assembled with fittings and appurtenances as shown on the plans. All connections shall be cleaned and solvent-welded in accordance with the pipe manufacturer's recommendations. The base of the riser pipe shall be anchored in at least 1 cu ft of concrete. Commercially available bagged concrete mix may be used. The filter stone cone shall consist of filter stone and shall be a minimum of 1 ft thick surrounding the PCBMP riser pipe.

(c) Outlet Pipe

PCBMP outlet pipe shall be of the diameter shown on the plans. PCBMP outlet pipe shall include end section.

(d) Control Structure

Control structures shall consist of a Type F inlet with a Type 7 casting and shall be located upstream of the outlet pipe.

Trash racks shall be chosen from the Department's QPL for Trash Racks. The trash rack shall be a minimum of 6 in. wider and 6 in. longer than the opening on the side of the inlet. The trash rack shall extend a minimum of 6 in. from the face of the inlet. The trash rack shall be connected to the structure in accordance with the manufacturer's recommendation.

626.07 Wet Swales

(a) Construction

Earthwork shall be as shown on the plans. Ditch excavation and grading shall be constructed as shown on the plans and in accordance with 203 and finished in accordance with 208.

(b) Outlet Pipe

PCBMP outlet pipe shall be smooth wall PVC pipe of the diameter shown on the plans and in accordance with 715.02(b).

(c) Control Structure

Control structures shall be constructed in accordance with 720 and as shown on the plans. Control structure material shall conform to the designed material as specified on the plans and in accordance with 907.04. Casting materials shall conform to the plans and 910.05.

If a trash rack is shown on the plans, it shall be in accordance with 626.06(d).

(d) Seeding and Sodding

Seeding and sodding shall include an emergent grass mix.

626.08 Wet Retention Pond

(a) Construction

Wet retention pond excavation and grading shall be constructed as shown on the plans and in accordance with 203 and finished in accordance with 208.

(b) Seeding and Sodding

Planting is not required below the permanent pool elevation.

(c) Outlet Pipe

PCBMP outlet pipe shall be smooth wall PVC pipe of the diameter shown on the plans and in accordance with 715.02(b).

(d) Control Structures

Control structures shall be located at the transition between the low flow PCBMP outlet pipe and the PCBMP outlet pipe and shall be constructed as shown on the plans and in accordance with 720. Control structure material shall conform to the designed material as specified on the plans and in accordance with 907.04. Casting materials shall conform to the plans and 910.05.

If a trash rack is shown on the plans, it shall be in accordance with 626.06(d).

626.09 Infiltration

(a) Construction

Earthwork shall be as shown on the plans. Excavation and grading shall be constructed as shown on the plans and in accordance with 203 and finished in accordance with 208.

The underlying soils of proposed infiltration facilities shall be protected from compaction during construction. Heavy trucks and machinery shall not be stored within 50 ft of infiltration basins and infiltration swales during construction. Movement of heavy trucks and machinery over infiltration basin and infiltration swale locations shall be minimized except when necessary for construction of the infiltration basin or swale.

If the infiltration basin is constructed before the area draining into it is permanently stabilized with vegetative cover at 70% density, the infiltration basin shall be protected from sediment in accordance with 205.05(i).

The Contractor shall not allow an illicit discharge or a spill to reach the infiltration PCBMP. Refueling, equipment washing, and concrete washouts shall not be placed within the area draining to the infiltration basin or swale. The Contractor shall be responsible for the surface and subsurface clean-up and site restoration from any illicit discharge impacts to the infiltration PCBMP and surrounding area.

(b) Outlet Pipe

PCBMP outlet pipe, if required, shall be in accordance with 626.02 and 626.06(c).

(c) Control Structure

Control structures, if required, shall be in accordance with 626.06(d).

626.10 Stormwater Treatment Unit

Hydrodynamic separators shall be chosen from the Department's QPL of Stormwater Treatment Units. The unit shall be chosen to meet the flow rate and the water quality treatment rate as shown on the plans. The final make and model for each unit shall be submitted to the Engineer and the Department's PCSM team for review and approval at least 14 calendar days prior to the installation of the unit. ~~Stormwater treatment units shall not be installed until the drainage area has reached 70% vegetation coverage and has been cleared of construction debris.~~ If the stormwater treatment unit is constructed before the area draining into it is permanently stabilized with vegetative cover at 70% density, the stormwater treatment unit shall be protected from sediment in accordance with 205. After installation, each stormwater treatment unit shall be cleaned of any accumulations of sediment, construction debris, or other foreign matter of any kind and shall be kept clear of such accumulation until final inspection.

A copy of the current manufacturer's installation and maintenance recommendations shall be provided prior to installation of manufactured PCBMPs. Shipping, handling, storage, and installation of manufactured PCBMPs shall be in accordance with the manufacturer's recommendations or as directed. In the event of conflict between the Department's specifications and the manufacturer's recommendations, the Contractor shall adhere to the more restrictive regulation~~ or as directed by the Engineer~~.

(a) Materials and Storage

Metal stormwater treatment units shall be polymer coated. Plastic hydrodynamic separators will not be allowed.

The Contractor shall exercise care in the storage and handling of the stormwater treatment unit components prior to and during installation. Any materials found to be defective will be rejected in accordance with 106.07. If the Contractor damages the unit during installation or if the unit or components leak or break after installation, the unit shall be replaced with no additional payment.

(b) Construction Requirements

The stormwater treatment unit shall be installed in the locations shown on the plans. The construction and installation of precast concrete structures shall be in accordance with 720.03. The stormwater treatment unit shall be anchored in concrete or buoyancy calculations shall be provided to the Engineer and Department's PCSM Team at least 14 days prior to installation.

(c) Working Drawings

The Contractor shall submit working drawings to the Engineer and Department's PCSM Team at least 14 days prior to installation. No work shall begin prior to approval. Working ~~D~~drawings shall list site specific elevations, pipe sizes, and orientation of the structure. All

requested deviations from the plans shall be certified by an engineer licensed in the State of Indiana. Each submittal shall include the job name, designation number, and contract number.

(d) Locations of Existing Appurtenances and Associated Piping

Existing and proposed locations of appurtenances and associated piping will be shown on the plans. The Contractor shall ensure the proper fit of all materials and structures to existing appurtenances and associated piping.

(e) Installation

The stormwater treatment unit shall be installed in accordance with the manufacturer's recommendations and contract documents.

The Contractor shall fill all voids associated with lifting provisions provided by the manufacturer. These voids shall be filled with non-shrinking grout providing a finished surface consistent with adjacent surfaces. The Contractor shall trim all protruding lifting provisions flush with the adjacent concrete surface in a manner which leaves no sharp points or edges.

(f) Excavation

Excavation for installation of the stormwater treatment unit shall be in accordance with 720.03.

(g) Backfill

Backfill shall be in accordance with 211 and 720.03.

626.11 As-Built Submittal

The Contractor shall submit as-built information for the PCBMPs, including location coordinates, type of PCBMP, date of installation, and for manufactured products the make and model installed, upon completion of the work.

626.12 Method of Measurement

PCBMP pipe, PCBMP outlet pipe, and PCBMP riser pipe will be measured in accordance with 715.13.

Mulching material, seed mixtures, mulched seeding and sodding, sodding, water, and mobilization and demobilization for seeding will be measured in accordance with 621.13.

Excavation and grading will be measured in accordance with 203.27. No. 2 stone that is used as filter stone will be measured by the cubic yard based on the theoretical volume to the neat lines as shown on the plans. Geotextile for underdrains will be measured in accordance with 718.09. Revetment riprap will be measured in accordance with 616.12.

Inlets and castings for control structures will be measured in accordance with 720.06. Concrete anchors for the PCBMP riser pipe will not be measured. Excavation and grading will be measured for payment in accordance with 203.28. Control structures will be measured in accordance with 720.06.

Cleanouts and grated tops of risers will not be measured. Metal end sections will be measured in accordance with 715.13. Trash racks will be measured by the number or racks installed. Stormwater treatment units will be measured per each, complete in place.

626.13 Basis of Payment

PCBMP pipe, PCBMP outlet pipe, and PCBMP riser pipe will be paid for at the contract unit price per linear foot as Pipe, PCBMP; Pipe, PCBMP Riser; and Pipe, PCBMP Outlet respectively as shown below.

The Contractor will not be paid twice for installation of the same BMP/PCBMP~~; only the work performed to restore the BMP will be paid for so that the PCBMP is constructed as shown on the plans~~.

Mulching material, seed mixtures, mulched seeding and sodding, sodding, water, and mobilization and demobilization for seeding will be paid for in accordance with 621.14.

Excavation and grading will be paid in accordance with 203.28. Geotextile for underdrains will be paid for in accordance with 718.10. Revetment riprap will be paid for in accordance with 616.13. No. 2 filter stone will be paid for at the contract unit price per cubic yard.

Inlets and castings for control structures will be paid for in accordance with 720.07.

Trash racks will be paid for at the contract unit price per each. Stormwater treatment units will be paid for at the contract unit price per each for the size specified, complete in place.

Payment will be made under:

Pay Item	***Pay Unit Symbol***
No. 2 Filter Stone	*~~CYD~~CYS*
Pipe, PCBMP	*LFT*
Pipe, PCBMP Outlet	*LFT*
Pipe, PCBMP Riser	*LFT*
Stormwater Treatment Unit, _____ size	*EACH*
Trash Rack	*EACH*

The cost of the grated top of the riser pipe shall be included in the riser pipe.

The cost of the concrete anchors and the perforated grated top for the PCBMP riser pipe shall be included in the riser pipe.

The cost of cleanouts shall be included in the cost of pipe, PCBMP.

The cost of the stormwater treatment unit structure, excavation, dewatering, structure backfill, connection to existing or proposed sewer, flexible boom connectors, manhole steps, frames and castings and all other items necessary for a complete installation shall be included in the cost of the stormwater treatment unit.

The cost for collecting, assembling, and submitting the as built data shall be included in the cost of construction engineering.

All pipe fittings, reducers, increasers, closed caps, grated caps, cleanout ports, solvent cleaner and cement, and other incidentals needed to construct the stone trench underdrain system shall be included in the cost of the pipe, PCBMP.

All pipe, pipe fittings, baffles, concrete, diversion structures, access frame and cover or inlet casting grate, excavation, dewatering, backfill, labor, equipment, delivery cost, manufacturer's representative, and other required appurtenances and necessary incidentals to construct an off-line or inline stormwater treatment unit shall be included in the cost of stormwater treatment unit.

SECTION 626 – ~~BLANK~~*POST-CONSTRUCTION STORMWATER MANAGEMENT*

DISCUSSION:

This item was introduced by Mr. Novak, assisted by Mr. Harris, who explained that Post-Construction Stormwater Best Management Practices, PCBMPs, are a requirement under the Construction Stormwater General Permit. INDOT does not have established construction specifications to support PCBMPs. A Recurring Special Provision will offer general guidance for the design and construction of PCSWMs. It would help fill in the gaps and provide clearer direction for successful implementation of PCBMPs.

Mr. Novak proposed to create an RSP adding Standard Specification Section 626 for PCSM. Minor edits have been incorporated for clarification.

Prior to the meeting:

Mr. Koch commented that the stormwater treatments units, in 626.10, can be quite large and installed near the end of a pipe run (phase 1 work). As written, we would need to hold installation till subsequent phases are completed. We definitely do not want damaged/dirt treatment devices yet I do not believe it is practical to not install the unit till after 70% ground cover has been achieved. Please consider final cleaning and, if necessary, video documentation.

Further, Mr. Koch mentioned that more restrictive regulation language, while including "as directed by the Engineer" may result in points of contention. Since submittals and approvals are needed, is this language needed? Mr. Harris suggested revisions as shown in these minutes.

With regard to Working Drawings, Mr. Koch asked, will GIFE guidance be provided as to whom is the PCSM Team? Also, should deviations follow an RFI process and working drawing process? As written, a party could make, and request, an undesirable change but state that a PE stamped it. Mr. Harris stated that we will add GIFE instruction for contact with the PCSM group, and that deviations would still be subject to approval after stamped by a PE.

Mr. Koch also asked if these devices would need to be entered into a GIS program? If so, are detailed locations needed? Mr. Koch asked how will restoring be paid and quantified? Mr. Harris stated that we want the listed data from the contractor, and it will be up to INDOT to get it into the current GIS 'system'. Mr. Harris added that other than manufactured products and the filter stone, the work in this section will be measured and paid by pay items in the contract – such as excavation in accordance with 203.28, geotextile in accordance with 718.10 and so forth.

Mr. Koch stated that treatment units are often installed adjacent to either the roadway or an improved approach. Please consider adding structure backfill if within 6 ft of an improved surface. Mr. Harris responded that 626.10(g) refers to 211 for backfill of stormwater treatment units, 211 calls for structure backfill within 5 ft of pavement, and would be measured and paid for in accordance with 211.

Mr. Reilman asked about particular items and if clarification is needed. Mr. Harris agreed and minor edits were made to address those concerns.

Further discussion ensued concerning the 70% density in 626.10. Mr. Osborn, ICI, asked if any language from 720 could be used. Mr. Couch added that it is important to keep the structure clean. Mr. Koch added that this had been done previously through USPs using a 720 pay item, and if we need to mirror language from 720 into this, it would be prudent. Mr. Novak said they can continue this conversation outside of the meeting to address and resolve everyone's concerns about the 70% language.

COMMENTS AND ACTION

SECTION 626 – ~~BLANK~~*POST-CONSTRUCTION STORMWATER MANAGEMENT*

[continued]

Mr. Koch inquired about the language in the Basis of Payment concerning the language that the Contractor will not be paid twice for the installation of the same BMP/PCBMP, and if the language about restoring could cause confusion. Following further discussion, that language was removed. Additional language was also added for clarification of the storm water treatment unit pay item.

Mr. Novak revised his revised motion. Mr. Koch seconded his second again.

Motion: Mr. Novak Second: Mr. Koch Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** ___ Passed as Submitted _X_ Passed as Revised ___ Withdrawn
2024 Standard Specifications Sections: Section 626, pg. 584 Recurring Special Provisions or Plan Details: proposed new Standard Drawing affected: NONE Design Manual Chapter: 203-5 and 204 GIFE Section: Sections 2, 4, and 20	___ 2028 Standard Specifications _X_ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP _X_ Create RSP (No. 626-R-796) Effective: December 1, 2025 ___ Revise RSP (No.___) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: _X_ GIFE Update ___ Frequency Manual Update ___ AWP Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The JTRP research project on the Investigation into the Durability and Performance of High Friction Surface Treatments, SPR-4300, identified several improvements for the high friction surface treatment recurring special provision based on the results of the first statewide high friction surface treatment contract, T-40130. Improvements are needed to the material requirements, minimum application temperature, surface preparation, and acceptance testing.

PROPOSED SOLUTION: Implement the recommended changes by the research to the high friction surface treatment recurring special provision. The material requirements for the polymeric resin binder and calcined bauxite would be adjusted, the minimum application temperature would be increased from 60°F to 65°F, the maximum crack width that can be filled without patching would be changed from 1.75 in. to 0.50 in., and the acceptance testing requirements would be adjusted to match the equipment at INDOT's Research Division.

APPLICABLE STANDARD SPECIFICATIONS: 617

APPLICABLE STANDARD DRAWING: No

APPLICABLE DESIGN MANUAL CHAPTER: No

APPLICABLE SECTION OF GIFE: No

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: RSP 617-T-213

PAY ITEMS AFFECTED: No

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc review by APAI, Traffic Standards Subcommittee and Joe Novak.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Pay Item: 617-12128, High Friction Surface Treatment

IMPACT ANALYSIS (attach report): Yes

Submitted By: Joe Bruno on behalf of Dave Boruff

Title: Sr. Traffic Engineer, Signals & Markings

Division: INDOT Traffic Engineering Division

E-mail: jbruno@indot.in.gov

Date: 5/27/2025

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)? No
Will this proposal improve:

Construction costs? No
Construction time? No
Customer satisfaction? Yes
Congestion/travel time? No
Ride quality? Yes

Will this proposal reduce operational costs or maintenance effort? Yes

Will this item improve safety:

For motorists? Yes
For construction workers? No

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? Yes
Design process? No

Will this change provide the contractor more flexibility? No

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? 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: N/A

617-T-213 HIGH FRICTION SURFACE TREATMENT

(Revised 04-25-21)

The Standard Specifications are revised as follows:

SECTION 617, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 617 – ~~BLANK~~*HIGH FRICTION SURFACE TREATMENT*

617.01 Description

This work shall consist of applying a high friction surface treatment, HFST, on asphalt or concrete pavement to enhance the skid resistance.

The HFST shall be composed of calcined bauxite aggregate bound with a polymeric resin.

617.02 Materials

Materials shall be in accordance with the following:

(a) General

A Type A certification in accordance with 916 and test reports from an independent laboratory shall be provided for polymeric resin binder and aggregate at least 14 days prior to application. The results of the following, listed in (b) and (c), shall be shown on the certification.

Materials shall be stored in a clean, dry environment and in accordance with the manufacturer's recommendations.

Material safety data sheets, product data sheets, and other information pertaining to the safe practices for the storage, handling, and disposal of the materials, and their health hazards shall be obtained from the manufacturer and posted at the material storage areas. A copy of such information shall be provided to the Engineer.

(b) Polymeric Resin Binder

The polymeric resin binder shall consist of a two part thermosetting polymer resin compound which holds the aggregate firmly in position, and in accordance with the following:

POLYMERIC RESIN BINDER MATERIAL PROPERTIES REQUIREMENTS		
Property	*Test Method*	*Requirements*
Adhesion Strength, psi @ 24 hrs	*ASTM C1583*	*250 minimum or 100% substrate failure*
Compressive Strength, psi, minimum	*ASTM C579, Method B*	*1,000 (3 hours)* *5,000 (7 days)*
Cure Rate (Dry through time), hours	*ASTM D1640,* *55 mil wet thickness @ 75°F*	*3 maximum*

Durometer Hardness (Type D)	*ASTM D2240, Type 1 precision Type D method*	*60 – ~~80~~75 (7 days, 73°F)*
Elongation at Break Point, %	*ASTM D638, Type I specimens*	*~~30~~40 – 80 (7 days, 73°F)*
Gel Time for concrete surfaces, minutes	*ASTM C881 AASHTO M 235*	*10 minimum*
Mixing Ratio	*Provide manufacturer's recommendations a minimum of 14 days prior to application*	*Per manufacturer*
Modulus @ ~~77~~73°F, psi	*ASTM C881 (7 days)*	*≤ ~~90~~100,000 (asphalt) ≤ 130,000 (concrete)*
Ultimate Tensile Strength, psi	*ASTM D638, Type I specimens*	*1,500 - 5,000 (7 days)*
Viscosity, poises @ 10 minutes	*ASTM D2556*	*7 - 30*
Water Absorption, %	*ASTM D570*	*1 maximum*

The binder test specimens shall be cured for seven days at 73 ±2°F and tested immediately upon curing.

(c) Aggregate

The aggregate shall be calcined bauxite that is clean, dry, free from foreign matter, and in accordance with the following:

CALCINED BAUXITE AGGREGATE MATERIAL REQUIREMENTS		
Property	*Test Method*	*Requirements*
Aluminum Oxide, %	*ASTM C25*	*87 minimum*
Gradation *Sieve Designation:* *No. 4 (4.75 mm)* *No. 6 (3.35 mm)* *No. 16 (1.18 mm)* *No. 30 (~~0.6 mm~~600 µm)*	*AASHTO T 27*	*Percent Passing:* *100* *95.0-100.0* *0.0-5.0* *0.0-1.0*
~~Hardness~~	*~~Moh's Scale~~*	*~~8 minimum~~*
LA Abrasion Loss, % (C Grading)	*AASHTO T 96*	*12.5 maximum*
Micro- D~~u~~eval Abrasion Loss, % (NMAS-9.5 mm)	*AASHTO T 96*	*~~10 maximum (C grading)~~ 5.5*
Moisture Content, %	*AASHTO T 255*	*0.2 maximum*
Minimum Polish~~ed Stone~~ Value, PV-10 (NAS-9.5 mm, main scale)	*AASHTO T 279*	*~~38-44~~59*
~~Sodium Sulfate Soundness, %~~	*~~AASHTO T 104~~*	*~~12 maximum~~*

(d) Quality Control Plan

The Contractor shall submit a Quality Control Plan, QCP, to the Engineer for approval at least 14 days prior to application. The QCP shall show proposed methods to control the equipment,

materials, mixing, and paving operations to ensure conformance with these specifications. The QCP shall contain, at a minimum, the following information:

1. *Key personnel with contact information.*

2. *Polymeric resin production plants, location of plants, personnel qualifications, inspection and record keeping methods, equipment calibration records, and accreditation certificates.*

3. *Aggregate production plant locations, personnel qualifications, inspection and record keeping methods, equipment calibration records, and accreditation certificates.*

4. *Mix design in accordance with the manufacturer's recommendations.*

5. *Moisture control methods of aggregate.*

6 *List of manufacturer recommendations for storage of material, weather restrictions, working and set-up time, curing time, and opening to traffic.*

7. *Cleaning and maintenance schedule for truck-mounted application machine, including metering and monitoring devices.*

8. *Corrective actions that shall be taken for unsatisfactory construction practices and deviations from specifications.*

9. *A technical expert from the polymeric resin manufacturer shall be on call or on site for the startup operations to advise construction personnel in placing the HFST.*

10. *The QCP shall designate a QC Manager. The QC Manager shall be on the jobsite at all times during placement of the HFST.*

The QC Manager shall be responsible for the required field quality control sampling and testing in conformance with the approved quality control plan and contract documents. All sampling shall be performed in the presence of and in locations as directed by the Engineer. The Contractor shall maintain and make available upon request complete records of sampling, testing, actions taken to correct problems, and quality control inspection results.

CONSTRUCTION REQUIREMENTS

617.03 Truck-Mounted Application Machine

The HFST application machine shall be capable of the uniform application of the binder and aggregate at a minimum continuous application rate of 2,300 sq yd/h.

617.04 Weather Restrictions

The polymeric resin binder material shall be applied on dry surfaces, between ~~April~~May 1 and ~~October 31~~September 30, when the ambient temperature is at least ~~60~~65°F and rising, but no more than ~~105~~100°F~~, unless the polymeric resin manufacturer can provide test data to support installation outside these ranges~~.

The HFST materials shall not be placed when rain is forecast during application or curing. There shall be no visible moisture present on the surface of the pavement at the time of application of the HFST. A plastic sheet, 18 in. by 18 in. that is left taped in place for a minimum of two hours, in accordance with ASTM D4263, shall be used to identify moisture in the pavement.

617.05 Preparation

Roadway patching shall be performed in accordance with 304.04 for asphalt pavement and 506 or 901.07 for PCCP.

All inadequately sealed joints and cracks 1/4 to ~~1 3/4~~1/2 in. wide shall be cleaned and filled in accordance with 408 with a sealant approved by the polymeric resin manufacturer, which will bond to the specified polymeric resin binder. Cracks shall be blown clean using a compressed air lance. The cleaned cracks shall be filled with the approved sealant such that the surface is flush with the pavement. Cracks wider than 1/2 in. shall be patched.

The Contractor shall protect utilities, drainage structures, curbs, and any other structure within or adjacent to the area to be treated. The Contractor shall cover and protect all bridge expansion joint devices, existing pavement markings, preformed joint seal, raised pavement markers, and vehicle detection materials that will remain prior to HFST application.

HFST applied on either new HMA or new PCCP surface or HMA patches ~~in a contract,~~ shall be applied at least 30 days after placement of the underlying pavement.

HFST applied on PCCP patches shall be applied at least 30 days after placement of the patch unless rapid setting patch materials are used in accordance with 901.07 and ~~the material selected has~~with written approval from the polymeric resin manufacturer. Areas to be patched will be marked on the surface by the Engineer. The marked pavement shall be removed to the depth shown on the typical section, or as directed.

All receiving surfaces shall be clean, dry and free of dust, oil, debris and other material that might interfere with the bond between the polymeric resin binder material and existing surfaces.

Existing PCCP surfaces shall be cleaned by shot blasting to remove all curing compounds, loosely bonded mortar, surface carbonation, and deleterious material. The prepared surface shall comply with the International Concrete Repair Institute, ICRI, standard for surface roughness CSP 5. After shot blasting, air wash, with a minimum of 180 cu ft/min of clean and dry compressed air, to remove all dust, debris, and deleterious material. The Contractor shall maintain the air lance perpendicular to the surface and the tip of the air lance within 12 in. of the surface.

Existing HMA surfaces shall be air washed with a minimum of 180 cu ft/min of clean and dry compressed air to remove all dust, debris, and deleterious material. The Contractor shall maintain the air lance perpendicular to the surface and the tip of the air lance within 12 in. of the surface.

The Contractor shall obtain approval from the Engineer to proceed with installation upon completion of surface preparation.

617.06 Test Section

For quantities greater than 1,000 sq yds, a minimum test section of 200 sq yds shall be applied within the contract to demonstrate the truck-mounted application machine has been properly calibrated. This test section shall be considered part of the HFST quantity on the contract. The Contractor shall correct any deficient areas before opening to traffic as directed by the Engineer at no additional cost. The test section shall be opened to traffic only after curing has completed, and no uncovered polymeric resin remains exposed. The field conditions, including ambient and surface temperatures, anticipated for the production work shall be replicated during the test. The Contractor shall document the settings on the applicator equipment, initial quantities of polymer binder resin and aggregate topping, and unused quantities of resin and aggregate topping remaining in the applicator equipment after applying the HFST. The "dry through time" for the polymer binder resin system shall be noted. The test notes shall be provided to the Engineer.

617.07 HFST Application

~~*A self-propelled, fully automated truck mounted application machine shall be used. Automated applications shall be completed in one course for widths up to 12 ft.*~~

(a) Binder Application

The binder components shall be mixed proportionally in accordance with the manufacturer's recommended ratio. The polymeric resin binder shall be applied by a truck-mounted application machine onto the pavement section to be treated. The binder shall be applied at a uniform application rate of 3.5 sq yd/gal. with a uniform thickness of 50 mils onto the pavement. The binder shall not separate in the mixing lines, cure, dry, chill, set up, or otherwise impair retention bonding of the high friction surfacing aggregate. No seams shall be visible in the middle of the traffic lanes of the finished work after application of the surface aggregate.

(b) Aggregate Application

The aggregate shall be applied by the same truck-mounted application machine, which includes an aggregate drop or broadcast spreader, immediately after placing the polymeric resin binder. The Contractor shall not use chip spreaders, vehicle tires, rollers, vibratory compactors or devices that throw loose aggregate onto any part of the live roadway lanes for applying the aggregate onto the wet uncured resin. Recovered bauxite aggregate may only be reused once and shall be blended with new bauxite at a rate of two parts of new bauxite to one part of recovered bauxite. The aggregate shall be applied uniformly to ensure complete coverage of the wet polymeric resin binder and result in a retained rate of 11 to 15 lbs/sq yd. No exposed polymeric resin shall remain visible on the surface.

(c) Polymer Mixing and Distribution Equipment

Polymer mixing and distributing equipment shall, at a minimum, consist of a truck-mounted, temperature-controlled polymer mixing and distribution system capable of accurately blending the resin and hardening components of the polymer system. The mixing and distributing system shall include thermostat heating element-controlled mixing capability. Each component of the polymer shall be in a tote made of a translucent material and shall be supplied by a pump. Wheelbarrows shall not be used as a polymer mixing and distribution system. However, notched squeegees with 3/16 in. deep notches and 1/2 in. nap rollers may be used to distribute the mixed polymer. The amount of the resin and hardener components shall be continuously and independently measured with flow meters prior to mixing. Mixing shall be in-line and produce a continuous stream of mixed polymer at the manufacturer's required proportioning prior to exiting the dispensing nozzle. The mixing equipment may be either a truck-mounted mechanical mixer or the material may be mixed by a static mixer contained in the wand applicator. The mixing equipment and distribution system shall automatically and accurately proportion the components in accordance with the manufacturer's recommendations, mix, and continuously apply the mixed polymer uniformly and accurately to the work area at the specified rate.

(d) Aggregate Distribution Equipment

The aggregate distribution system shall consist of a truck-mounted air-blown pneumatic spreader using oil-free compressed air in accordance with ASTM D4285. Cleanliness of the compressed air shall be verified by using either an absorbent or non-absorbent white collector material positioned a maximum of 24 in. from the air discharge point, centered in the compressed air stream. The spreader shall apply the aggregate to the surface in a uniform manner. Chip spreaders, salt spreaders, or other rotary-type spreaders shall not be used.

617.08 Curing and Clean-Up

The HFST shall be allowed to cure in accordance with the polymeric resin manufacturer recommendations. Two separate clean-up processes shall be performed by removing the excess aggregate on the treated area and adjacent areas. The Contractor shall perform the initial clean-up before opening to traffic. A secondary clean-up shall be performed three to five days after construction.

617.09 Field Acceptance Testing

The Contractor shall remove and re-apply HFST where any patches of exposed polymeric resin exist, or where the HFST separates from the pavement at no additional cost. The HFST treated area will be tested for Mean Profile Depth, at the discretion of the Engineer, within ~~60~~90 days after construction in accordance with the requirements in the following tables. Deficient locations shall be repaired or replaced as directed by the Engineer.

FIELD ACCEPTANCE TESTING REQUIREMENTS			
Property	*Requirement, minimum*	*Frequency*	*Test Method*
~~*FN40R (Corrected Field FN)*~~	~~*72*~~	~~*Every 0.1 mile in each lane*~~	~~*ASTM E274 (Ribbed tire)*~~

~~Field Dynamic~~ Friction Number ~~Value~~ (~~12~~40 mph)*	~~0.90~~80	*1 per location, or 1 every 1,500 lane-feet, whichever is shorter, between 24 h and 72 h after HFST application*	*ASTM E~~1911~~ 274 (Smooth tire)*
Mean Profile Depth, ~~in~~mm*	~~1.0~~ 1.5	*1 per location, or 1 every 1,500 lane-feet, whichever is shorter*	*ASTM E2157*
** Denotes an optional test.*			

~~*SPEED CORRECTION FACTORS*~~
~~*for ASTM E274 Testing Using a Ribbed Tire*~~

~~*Test Speed (mph)*~~	~~*FN Correction*~~	~~*Test Speed (mph)*~~	~~*FN Correction*~~	~~*Test Speed (mph)*~~	~~*FN Correction*~~
~~*20*~~	~~*-9.3*~~	~~*30*~~	~~*-4.8*~~	~~*40*~~	~~*0.0*~~
~~*21*~~	~~*-8.9*~~	~~*31*~~	~~*-4.4*~~	~~*41*~~	~~*0.5*~~
~~*22*~~	~~*-8.4*~~	~~*32*~~	~~*-3.9*~~	~~*42*~~	~~*1.0*~~
~~*23*~~	~~*-8.0*~~	~~*33*~~	~~*-3.4*~~	~~*43*~~	~~*1.5*~~
~~*24*~~	~~*-7.6*~~	~~*34*~~	~~*-2.9*~~	~~*44*~~	~~*2.0*~~
~~*25*~~	~~*-7.1*~~	~~*35*~~	~~*-2.5*~~	~~*45*~~	~~*2.5*~~
~~*26*~~	~~*-6.7*~~	~~*36*~~	~~*-2.0*~~	~~*46*~~	~~*3.1*~~
~~*27*~~	~~*-6.2*~~	~~*37*~~	~~*-1.5*~~	~~*47*~~	~~*3.6*~~
~~*28*~~	~~*-5.8*~~	~~*38*~~	~~*-1.0*~~	~~*48*~~	~~*4.1*~~
~~*29*~~	~~*-5.3*~~	~~*39*~~	~~*-0.5*~~	~~*49*~~	~~*4.6*~~

617.10 Method of Measurement

High friction surface treatment will be measured by the square yard, complete in place. The width for measurement will be the width of the top surface as shown on the plans or directed by the Engineer.

Patching will be measured in accordance with 304.06 for asphalt pavement and 506.13 for PCCP.

Pavement marking removal will be measured in accordance with 808.12.

617.11 Basis of Payment

The accepted quantity of the high friction surface treatment will be paid for at the contract unit price per square yard.

Patching will be paid for in accordance with 304.07 for asphalt pavement and 506.14 for PCCP.

Pavement marking removal will be paid for in accordance with 808.13.

Payment will be made under:

Pay Item	***Pay Unit Symbol***
High Friction Surface Treatment	*SYS*

The cost of all materials, equipment, preparation, and testing necessary to apply and clean-up the high friction surface treatment shall be included in the cost of high friction surface treatment.

COMMENTS AND ACTION

617-T-213 HIGH FRICTION SURFACE TREATMENT

DISCUSSION:

Mr. Bruno, sitting in as proxy for Mr. Boruff, introduced and presented this item, as revised, stating that the JTRP research project on the Investigation into the Durability and Performance of High Friction Surface Treatments, SPR-4300, identified several improvements for the high friction surface treatment recurring special provision based on the results of the first statewide high friction surface treatment contract, T-40130. Improvements are needed to the material requirements, minimum application temperature, surface preparation, and acceptance testing.

Mr. Bruno proposed to implement the recommended changes by the research to the high friction surface treatment recurring special provision. The material requirements for the polymeric resin binder and calcined bauxite would be adjusted, the minimum application temperature would be increased from 60°F to 65°F, the maximum crack width that can be filled without patching would be changed from 1.75 in. to 0.50 in., and the acceptance testing requirements would be adjusted to match the equipment at INDOT's Research Division.

Mr. Koch asked, concerning the language in 617.05, for clarity perhaps strike 'the material selected'?
Mr. Bruno agreed and suggested the revision as shown in these minutes. Mr. Koch agreed that this reads much cleaner now. Further discussion ensued with Mr. Reilman and Mr. Bruno concerning the testing time limit of within 90 days and the language "at the discretion of the Engineer". It was agreed to add "for mean profile depth" after "tested".

Motion: Mr. Bruno Second: Mr. Koch Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** ___ Passed as Submitted _X_ Passed as Revised ___ Withdrawn
Standard Specifications Sections: SECTION 617 – BLANK Recurring Special Provisions or Plan Details: 617-T-213 HIGH FRICTION SURFACE TREATMENT Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	___ 2028 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP ___ Create RSP (No.___) Effective: _X_ Revise RSP (No. 617-T-213) Effective: December 1, 2025 ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: _X_ GIFE Update _X_ Frequency Manual Update _X_ AWP Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The Standard Specifications currently allow only Masonite and steel shims. One of the most commonly available and used materials is high strength plastic, which isn't listed in the Specifications.

PROPOSED SOLUTION: Add high strength plastic to the list of acceptable shim materials.

APPLICABLE STANDARD SPECIFICATIONS: Sections 714.06 and 723.11

APPLICABLE STANDARD DRAWING: N/A

APPLICABLE DESIGN MANUAL CHAPTER: N/A

APPLICABLE SECTION OF GIFE: N/A

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: N/A [RSP 714-R-748 not impacted]

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Coordination with Indiana Constructors Incorporated and Jim Reilman.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Contracts that include 714 or 723 pay items.

IMPACT ANALYSIS (attach report):

Submitted By: Pete White

Title: Design Manager

Division: INDOT Bridge Engineering

E-mail: PeWhite@indot.in.gov

Date: May 29, 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)? No
Will this proposal improve:

- Construction costs? No
- Construction time? Yes
- Customer satisfaction? No
- Congestion/travel time? No
- Ride quality? No

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? Yes

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

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 STANDARD SPECIFICATIONS

SECTION 714 – REINFORCED CONCRETE BOX STRUCTURES
714.06 Precast Concrete Headwalls, Wingwalls, and Footings
SECTION 723 – REINFORCED CONCRETE THREE-SIDED STRUCTURES
723.11 Placement of Structure Sections and Wingwalls

(Note: Proposed changes shown to the 2026 Standard Specifications)

The Standard Specifications are revised as follows:

SECTION 714, BEGIN LINE 233, ~~DELETE~~*INSERT* AS FOLLOWS:

714.06 Precast Concrete Headwalls, Wingwalls, and Footings

(a) Headwall Reinforcement Placement Relative to Top of Structure

The headwall shall be a single precast piece which spans from sidewall to sidewall of a span. The vertical headwall reinforcement shall be attached to the top of the structure by either drilling holes or precasting holes. A chemical anchoring material, if used, shall be from the QPL of Chemical Anchor Systems.

(b) Wingwall Placement

Each wingwall that is not precast as one unit with the footing shall be set on *high strength plastic,* masonite*,* or steel shims. A minimum gap of 1/2 in. shall be provided between the footing and the bottom of each wingwall. Once the wingwalls are placed, the space underneath the wingwall section to the top of the keyway sides shall be filled with prepackaged grout in accordance with ASTM C1107, or conventional or self-consolidating fine grout in accordance with ASTM C476, except as modified herein. If conventional fine grout is used, it shall be troweled into the keyway and mounded on one side of the wingwall. The mound of conventional fine grout shall be vibrated until it passes through to the other side of the wingwall. After completing this process on one side, if the conventional fine grout has not passed through to the other side, the process shall be repeated on the other side. Conventional or self-consolidating fine grout shall be from a prepackaged source or composed of one of the following mixtures.

SECTION 723, BEGIN LINE 300, DELETE AND INSERT AS FOLLOWS:

723.11 Placement of Structure Sections and Wingwalls

For three-sided arch-topped structures and three-sided flat-topped structures, the structure sections shall be set on *high strength plastic,* masonite*,* or steel shims. Each wingwall that is not precast as one unit with the footing shall be set on *high strength plastic,* masonite*,* or steel shims. A minimum gap of 1/2 in. shall be provided between the footing and the bottom of each section or wingwall. Once the wingwalls or structure sections are placed, the space underneath the wingwall or structure leg section to the top of the keyway sides shall be filled with prepackaged grout in accordance with ASTM C1107, or conventional or self-consolidating fine grout in accordance with ASTM C476, except as modified herein. If conventional fine grout is used, it shall be troweled into the keyway and mounded on one side of the leg or wingwall. The mound of conventional fine grout shall be vibrated until it passes through to the other side of the leg or wingwall. After completing this process on one side, if the conventional fine grout has not passed through to the other side, the process shall be repeated on the other side. Conventional or self-consolidating fine grout shall be from a prepackaged source or composed of one of the following mixtures:

(a) 930 lb/cu yd Type I portland cement with No. 23 natural sand or mortar sand.

(b) 930 lb/cu yd Type M masonry cement with No. 23 natural sand or mortar sand.

(c) 828 lb/cu yd Type I portland cement and 75 lb/cu yd hydrated lime with No. 23 natural sand or mortar sand.

The maximum water/cement ratio shall be 0.446 for both conventional and self-consolidating fine grout. An air-entraining agent from the QPL of PCC Admixtures and Admixture Systems may be used. A Type F or Type G chemical admixture from the QPL of PCC Admixtures and Admixture Systems shall be used in self-consolidating fine grout to achieve the slump flow and visual stability index requirements. Filling procedure B of ASTM C1611 will be used for measuring slump flow. Appendix X1 of ASTM C1611 will be used for determining the visual stability index value.

Acceptance of conventional fine grout will be based on an air content of 12% ±4%. Acceptance of self-consolidating fine grout will be based on tests for air content, slump flow, and visual stability index. Air content shall be 12% ±4%. Slump flow shall be 27 in. ±3 in. Visual stability index value shall not exceed 1. A Type C certification in accordance with 916 shall be provided for prepackaged grout.

True arch shape structures may have grout leveling pads poured in the footing keyways to ensure the correct seating of the true arch sections. Leveling pads shall be approximately 2 in. thick and 16 in. long to ensure that each true arch section is resting on approximately 8 in. of pad at each joint. The leveling pads shall be poured within 1/8 in. of the required elevation. No loads shall be placed on the grout leveling pads within 72 h of their placement. *High strength plastic or* ~~M~~*m*asonite shims may also be used as leveling pads. Concrete blocks of 1 1/2 in. thickness, hardwood wedges, and steel or plastic shims shall be placed to retain the true arch sections in their proper positions until grout can be placed in the keyway. Grout shall be consolidated in the keyway to ensure that the entire area around the true arch section is completely filled. The grout used to construct the leveling pads and to fill the keyways shall be in accordance with this section. Grout shall not be placed if the air temperature is expected to be below 35°F for a period of 72 h following grout placement.

COMMENTS AND ACTION

714.06 Precast Concrete Headwalls, Wingwalls, and Footings
723.11 Placement of Structure Sections and Wingwalls

DISCUSSION:

Mr. White introduced and presented this item stating that the Standard Specifications currently allow only Masonite and steel shims. One of the most commonly available and used materials is high strength plastic, which isn't listed in the Specifications.

Mr. White proposed to add high strength plastic to the list of acceptable shim materials.

There was no further discussion and this item passed as submitted.

Motion: Mr. White Second: Mr. Reilman Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** _X_ Passed as Submitted ___ Passed as Revised ___ Withdrawn
Standard Specifications Sections: 714.06 (2024) pg 728; 723.11 (2024) pg. 800; 714.06 (2026) pg. 738 723.11 (2026) pg. 812 Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	_X_ 2028 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP _X_ Create RSP (No. 7xx-R-xxx) Effective: December 1, 2025 ___ Revise RSP (No.___) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ AWP Update

PROPOSAL TO THE STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Unique Special Provisions are intended for a single use on a specific contract for a specific situation on the contract that is not already covered by the Standard Specification or a Special Provision. However, some USPs have been utilized quite frequently on numerous contracts, and have become somewhat "standard". This USP has been previously titled "Construction Engineering", so for clarification, it has been re-titled to "Station Lath", since that is what it pertains to.

PROPOSED SOLUTION: The proposed solution for this USP is to convert it to a Recurring Special Provision in order to expedite the process of implementing this Special Provision into future contracts, while eliminating the need for further review.

APPLICABLE STANDARD SPECIFICATIONS: 105.08(b)

APPLICABLE STANDARD DRAWINGS:

APPLICABLE DESIGN MANUAL SECTION:

APPLICABLE SECTION OF GIFE:

APPLICABLE RECURRING SPECIAL PROVISIONS:

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Scott Trammell, Construction Specifications Engineer, and the USP Review Process, et al.

IF APPROVED AS A RECURRING SPECIAL PROVISION, THE BASIS FOR USE IS: As determined necessary by the Project Designer.

IMPACT ANALYSIS (attach report): Yes

Submitted By: Kurt Pelz

Title: Technical Support Supervisor

Organization: Construction Management Technical Support

Phone Number: 317-691-4800
Date: May 29, 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 Approved Materials List? No
Will this proposal improve:

- Construction costs? Yes
- Construction time? Yes
- Customer satisfaction? Yes
- Congestion/travel time? Yes
- Ride quality? N/A

Will this proposal reduce operational costs or maintenance effort? Yes

Will this item improve safety:

- For motorists? No
- For construction workers? Yes

Will this proposal improve quality for:

- Construction procedures/processes? Yes
- Asset preservation? Yes
- Design process? Maybe

Will this change provide the contractor with 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? Yes
- 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: For ease of use for implementation and to improve the USP Review Process flow capacity.

xxx-x-xxx STATION LATH

(Adopted xx-xx-25)

Station lath, in accordance with 105.08(b), shall be placed at a maximum interval of 200 ft throughout the length of the project. Additional station lath shall be installed at all tangent points of public road approaches, turn lanes, and passing blisters. Stationing shall be clearly marked on the lath utilizing a minimum 1/4 in. width tip marker to produce numbers and symbols with a sizing of 2~~.25~~ *1/4* in. height by 1~~.25~~ *1/4* in. width with 1 in. spacing. Station lath shall be maintained throughout the life of the contract. All ground affixed station lath shall be removed on or before the last day of work. Marking of temporary or permanent concrete barriers will not be allowed.

For Non-Divided Roadways: Lath shall be installed along the right side of the roadway.

For Non-Divided Roadways with four or more lanes: Lath shall be installed along the right and left sides of the roadway.

For Divided Roadways: Lath stationing shall be placed in the median ~~and be visible from both directions of travel~~*at least 15 ft from the median edge of shoulder pavement or in alignment with the cable rail, if present, but not more than 70 ft from the furthest pavement edge line or at least 15 ft from the right and left sides of the roadway, as directed.* If the section of roadway is divided by a concrete median barrier wall, lath stationing shall be installed by an approved mechanical device on the median wall or along the left and right sides of the roadway.

This work shall be included in the cost of construction engineering.

COMMENTS AND ACTION

XXX-X-XXX STATION LATH (proposed new)

DISCUSSION:

This item was introduced and presented by Mr. Pelz, assisted by Mr. Trammell, who clarified that Unique Special Provisions are intended for a single use on a specific contract for a specific situation on the contract that is not already covered by the Standard Specification or a Special Provision. However, some USPs have been utilized quite frequently on numerous contracts, and have become somewhat "standard". This USP has been previously titled "Construction Engineering", so for clarification, it has been re- titled to "Station Lath", since that is what it pertains to.

Mr. Pelz stated that the proposed solution for this USP is to convert it to a Recurring Special Provision in order to expedite the process of implementing this Special Provision into future contracts, while eliminating the need for further review.

Following discussions with Mr. Koch and Mr. Kraushar, Mr. Pelz proposed the revisions shown for clarification.

After some discussion about the revisions, it was eventually agreed to approve this item as revised.

Motion: Mr. Pelz Second: Mr. Koch Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** ___ Passed as Submitted _X_ Passed as Revised ___ Withdrawn
2026 Standard Specifications Sections: NONE Recurring Special Provisions or Plan Details: (proposed new) Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	___ 2028 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP _X_ Create RSP (No. 105-R-797) Effective: December 1, 2025 ___ 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: There is currently no guidance to designers or contractors regarding the construction of temporary causeways. In order to obtain permits ahead of letting, designers need to conceptually show these temporary impacts in the permit applications. Currently with little guidance to designers and contractors, the details and requirements for causeways have varied significantly. In some cases, designers are showing causeways in great detail on the plans which is allowing little opportunity for contractor specific means and methods.

PROPOSED SOLUTION: To create more uniformity and establish uniform requirements that both satisfy environmental permitting agencies and allow contractors the most flexibility in the field, the proposed solution is a recurring special provision and recurring plan detail. The plan details outline the minimum requirements for flow, maximum elevations for the tops of causeways and acceptable materials. The recurring special provision includes reference to the permit (and associated applications) as well as payment details.

APPLICABLE STANDARD SPECIFICATIONS: 205

APPLICABLE STANDARD DRAWINGS: Proposed new series on temporary causeways (E 205-xxx) to be utilized as RPDs alongside the RSPs for the time being.

APPLICABLE DESIGN MANUAL SECTION: Guidance will need to be provided to designers to show the OHWM depth and width on the plans. Although it's not part of the IDM, Bridge Engineering can update the two Bridge Design Aids (BDA 100-01 and 100-05) that contain sample sets of plans. A notification will be sent out to the design consultants listserv to make designers aware of the update.

APPLICABLE SECTION OF GIFE: Section 3.1 -Stormwater Management, Section 29 – Shop Drawings, Falsework Plans and MSE wall design (Item m. Temporary Causeways)

APPLICABLE RECURRING SPECIAL PROVISIONS: None, currently a variety of USPs have been utilized to describe Temporary Causeway work and there is a lack of consistency statewide.

PAY ITEMS AFFECTED: Need new 205 pay item for Temporary Causeway, LSUM, there is a current 713-04331 Temporary Causeway pay item in use with the USPs that will need to be discontinued when the new item becomes effective.

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Adhoc Committee: Jacob Blanchard, Macayla Coleman, Greg Couch, Tom Harris, Jim Lesh, Amanda Ranck, Bill Schmidt, Stephanie Wagner. The following members from other state agencies have also been included: Matt Buffington (DNR), Moumita Mukherjee (DNR), and Jay Turner (IDEM). Have also reached out to contractor members of the ICI/INDOT Bridge Subcommittee for comment.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: As determined by the designer based on what is included in the permit application.

[CONTINUED]

IMPACT ANALYSIS (attach report): Attached

Submitted By: Joe Novak

Title: State Construction Engineer

Organization: INDOT Construction Management

Phone Number: 317-501-7805

Date: 05/29/25

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? N
Will approval of this item affect the Approved Materials List? N
Will this proposal improve:

- Construction costs? Y
- Construction time? Y
- Customer satisfaction? N
- Congestion/travel time? N
- Ride quality? N

Will this proposal reduce operational costs or maintenance effort? N

Will this item improve safety:

- For motorists? N
- For construction workers? Y

Will this proposal improve quality for:

- Construction procedures/processes? Y
- Asset preservation? N
- Design process? Y

Will this change provide the contractor more flexibility? Y

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

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

Is this proposal needed for compliance with:

- Federal or State regulations? Y
- AASHTO or other design code? Y

Is this item editorial? N

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

205-B-XXX TEMPORARY CAUSEWAY

(Adopted xx-xx-25)

Description

This work shall consist of designing, furnishing, installing, maintaining, and removing a temporary causeway in accordance with 105.03, the permits, and, where applicable, the Department's Design SWP3, submitted and accepted SWQCP, or an approved written site plan developed by the Contractor.

Throughout this provision, the term permits includes the permit approval letter, permit conditions, and permit application.

Materials

Materials shall be in accordance with the following:

Temporary Pipe.....713.05
Coarse Aggregate No. 2.....904.03
Geotextile.....918.02

Other accepted materials shall be non-erodible. No soil or other materials with fine particles susceptible to being washed away shall be utilized in the temporary causeway.

The causeway shall be constructed of clean materials that are free of any aquatic invasive species, including zebra mussels, as defined by section 312 IAC 9-9-3.

Construction Requirements

Temporary causeways shall be constructed of sufficient size and material for equipment support as necessary during construction.

Temporary causeways shall be used for Contractor access. Construction shall minimize disturbance to the channel and avoid areas shown as protected resources on the plans.

The stormwater BMPs adjacent to the channel area shall be installed prior to construction of the temporary causeway, in accordance with 205. Disturbance shall be minimized.

A temporary causeway may be required as part of an IDNR, IDEM, or COE permit. Permits or licenses required for a temporary causeway but not part of the contract documents shall be procured in accordance with 107.02.

The temporary causeways shown in the permits are conceptual and developed to obtain the necessary permits. The Contractor shall be responsible for detailed causeway design, safe ingress and egress of equipment, access to the work, stability and serviceability, and installation in accordance with the permit conditions.

The details of the temporary causeway shall be submitted to the Engineer for acceptance as part of the SWQCP or written site plan developed by the Contractor in accordance with 108.04 prior to construction. The causeway details submitted and accepted as part of the SWQCP or approved site plan shall satisfy

the requirements of the Department's Design SWP3, the CSGP, and all waterway permits.

Revisions to the causeway details that change the level or type of impacts authorized in the permit will require a permit modification request. The Contractor shall submit the documentation necessary for a permit modification request to the Engineer. Information shall include the following:

1. The scope of the proposed changes to the permitted impacts, such as ~~(~~methods and materials~~)~~;

2. The reason for the additional impacts and any avoidance or minimization that was considered; and

3. Contract plans marked with the location of all proposed changes.

All accepted modification requests will be submitted to the appropriate regulatory agency by the Department's Office of Ecology, Waterway Permits, and Stormwater.

The revised causeway details shall not be installed until the approved permit modification request has been received and posted at the site.

The causeway shall remain in place no longer than the duration specified in the permits. Duration extension requests may be approved by the Engineer only after receiving a revised permit from the permitting agency.

Maintenance

The temporary causeway shall be maintained at all times in accordance with the permits. The Contractor shall remove any debris in the channel or otherwise collected by the causeway.

In the event of a washout, the temporary causeway shall be repaired in accordance with the permits. Repairs shall include retrieval of lost materials unless it is not feasible or where the permits restrict it.

Removal

Upon completion of work requiring causeway access, all materials used to construct the causeway shall be completely removed from the channel. The Contractor shall minimize disturbance to the original streambed during removal. The Contractor shall minimize erosion and sedimentation during removal using appropriate stormwater BMPs. As approved by the Engineer, turbidity curtains may be allowed under specific conditions, including applications that do not include flowing water. Any areas disturbed by the temporary causeway shall be returned to their original condition and revegetated in accordance with 621, as shown as the final condition on the contract plans, or as directed.

Method of Measurement

Temporary causeways will not be measured for payment.

Basis of Payment

Temporary causeways will *not* be paid for ~~at the contract unit price per lump sum~~*directly*. *The cost thereof shall be included in the cost of other items.*

REVISION TO SPECIAL PROVISION AND STANDARD DRAWINGS

205-B-XXX TEMPORARY CAUSEWAY (proposed new)

~~Payment will be made under:~~

~~Pay Item~~	~~Pay Unit Symbol~~
~~Temporary Causeway~~	~~LS~~

The cost of design, materials, installation, maintenance, repair, permit modifications or addendums, and removal for the temporary causeway *will not be paid for directly. The cost thereof* shall be included in the cost of ~~the~~*other* pay item*s*.

~~Temporary Causeway will be paid only once per waterway regardless of how many times the causeway is moved, altered, or replaced.~~

Permit violations shall be resolved in accordance with 205.

REVISION TO SPECIAL PROVISION AND STANDARD DRAWINGS

E 205-XXXX-01 TEMPORARY CAUSEWAY INDEX AND GENERAL NOTES (proposed new)

INDEX	
SHEET NO.	SUBJECT
1	Temporary Causeway Index and General Notes
2	Temporary Causeway In Stream Ford
3	Temporary Causeway In Stream Culverts
4	Temporary Causeway Span

GENERAL NOTES:

1. The temporary causeway shall remain in place no longer than the time specified in the permits.
2. The Contractor shall confirm that all regulatory requirements are met prior to construction of any crossing.
3. The crossing shall be perpendicular to the stream flow. Spurs constructed parallel to the stream may be acceptable to access pier locations. Spurs shall meet the same requirements as the main causeway and shall not create additional restrictions to the flow.

INDIANA DEPARTMENT OF TRANSPORTATION

TEMPORARY CAUSEWAY
INDEX AND GENERAL NOTES

SEPTEMBER 2026

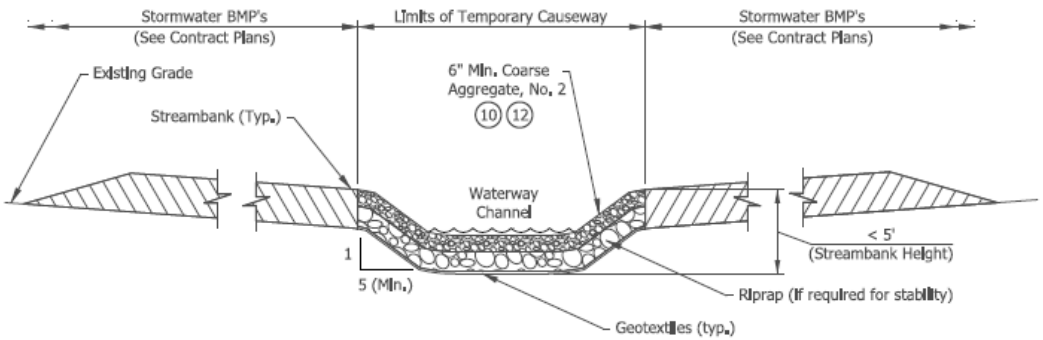
STANDARD DRAWING NO. E 205-XXXX-01

DESIGN STANDARDS ENGINEER DATE

CHIEF ENGINEER DATE

REVISION TO SPECIAL PROVISION AND STANDARD DRAWINGS

E 205-XXXX-02 TEMPORARY CAUSEWAY IN STREAM FORD (proposed new)



TEMPORARY CAUSEWAY
IN STREAM FORD
(ELEVATION)

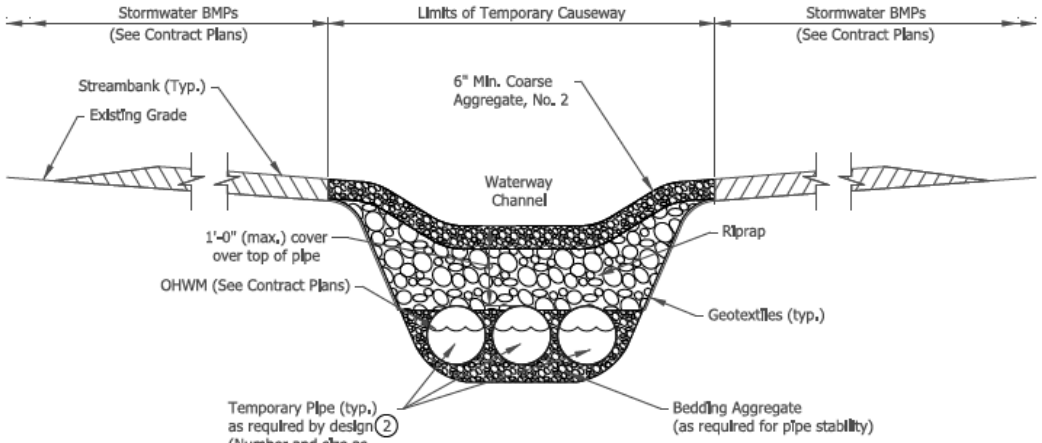
NOTES:

1. For use in ephemeral or intermittent streams as classified in the waters report in the permits only.
2. For use in channels with minimal construction traffic.
3. For use in channels with a streambank height less than 5 ft above the streambed.
4. For use in channels where the water depth does not exceed 2 ft under typical flow conditions and the drainage areas are less than 1 sq mi.
5. The streambed should support the low water crossing without special site preparation.
6. The causeway shall not be constructed in an officially designated trout stream, on a wild, scenic, or recreational river, or on an officially designated water trail route unless authorized by the permits.
7. The ford shall not direct water out of the channel.
8. Soil or other material shall not be placed in the channel. Existing material shall not be excavated from the channel except to lay back the stream bank for access.
9. Banks shall be laid back to no steeper than 5:1.
10. The maximum driving surface width shall be 30 ft.
11. All stone shall be placed on geotextile.
12. Temporary construction mats may be substituted for the coarse aggregate and riprap. Creosote-treated materials shall not be used.
13. The stream channel and stream banks shall be returned to their original condition after the temporary causeway is removed unless otherwise noted on the plans.

INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY CAUSEWAY IN STREAM FORD SEPTEMBER 2026	
STANDARD DRAWING NO. E 205-XXXX-02	
	XX/XX/20XX DESIGN STANDARDS ENGINEER DATE CHIEF ENGINEER DATE

REVISION TO SPECIAL PROVISION AND STANDARD DRAWINGS

E 205-XXXX-03 TEMPORARY CAUSEWAY IN STREAM CULVERTS (proposed new)



TEMPORARY CAUSEWAY
IN STREAM CULVERTS
(ELEVATION)

NOTES:

1. For use in perennial or intermittent streams as classified in the waters report in the permits.
2. The diameter of a single pipe or the sum of the diameters of multiple pipes shall be at least 1/2 of the OHWM width. For a partial causeway, any open stream width shall be included with the sum of the pipe diameters
3. Pipe diameters shall be as large as will fit into the existing stream channel without excavating. Minimum pipe diameter for any individual pipe shall be 14 in.
4. Multiple pipes may be installed to meet the design flow capacity.
5. The Contractor shall design and install the temporary causeway to minimize channel backwater during low flow. The pipe slope shall follow the slope of the existing stream.
6. Clearing and excavation of streambanks, streambed, and approach shall be minimized.
7. The length of any individual pipe shall not exceed 40 ft.
8. Pipe outlets shall be designed to avoid scour damage to the stream channel. Temporary energy dissipation may be required.
9. Stormwater BMPs shall be installed prior to construction of the temporary causeway.
10. Sufficient bedding aggregate shall be placed to support the pipe for the intended use. The pipe flow lines shall be kept as close to the existing channel flow line as possible.
11. All stone above the OHWM shall be placed on geotextiles.
12. The stream channel and stream banks shall be reestablished to the original grades unless otherwise noted on the plans.

INDIANA DEPARTMENT OF TRANSPORTATION

TEMPORARY CAUSEWAY
IN STREAM CULVERTS

SEPTEMBER 2026

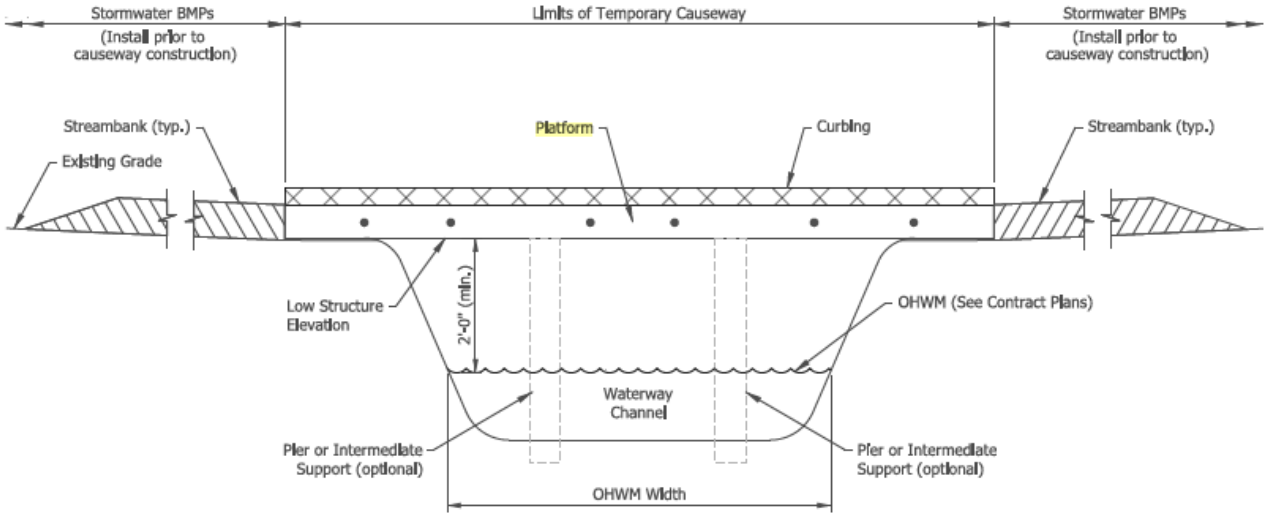
STANDARD DRAWING NO. E 205-XXXX-03

DESIGN STANDARDS ENGINEER DATE

CHIEF ENGINEER DATE

REVISION TO SPECIAL PROVISION AND STANDARD DRAWINGS

E 205-XXXX-04 TEMPORARY CAUSEWAY SPAN (proposed new, revised draft)



TEMPORARY CAUSEWAY
PLATFORM
(ELEVATION)

NOTES:

1. The low structure elevation shall be a minimum of 2 ft above the OHWM.
2. Construction shall minimize impacts to stream flows.
3. The width of piers and intermediate supports shall be less than 1/2 the OWHM width.
4. The platform shall be constructed and maintained to prevent soil tracked onto the platform from falling into the stream. Curbing shall be placed and securely fastened on each side of the platform.
5. Debris and soil shall be removed from the driving surface at least once daily. The removal process shall not allow debris and soil to enter the stream channel.
6. The temporary causeway shall not be constructed in an officially designated trout stream, on a wild, scenic, or recreational river, or an officially designated water trail route unless authorized by the permits.
7. The maximum driving surface width shall be 40 feet.
8. The platform ends, or abutments, shall be placed on stable banks.
9. All stone used above the OHWM shall be placed on geotextile.
10. No excavation shall occur within the stream unless authorized by the permits.
11. The Contractor shall remove all temporary materials, restore all disturbed areas to their original condition, and revegetate in accordance with 621, as shown as the final condition on the contract plans or as directed.

INDIANA DEPARTMENT OF TRANSPORTATION	
TEMPORARY CAUSEWAY PLATFORM	
SEPTEMBER 2026	
STANDARD DRAWING NO. E 205-XXXX-04	
	DESIGN STANDARDS ENGINEER DATE
	CHIEF ENGINEER DATE

COMMENTS AND ACTION

205-B-XXX TEMPORARY CAUSEWAY (proposed new)
E 205-XXXX-01 true -04 TEMPORARY CAUSEWAY (proposed new)

DISCUSSION:

This item was introduced and presented by Mr. Novak who explained that there is currently no guidance to designers or contractors regarding the construction of temporary causeways. In order to obtain permits ahead of letting, designers need to conceptually show these temporary impacts in the permit applications. Currently with little guidance to designers and contractors, the details and requirements for causeways have varied significantly. In some cases, designers are showing causeways in great detail on the plans which is allowing little opportunity for contractor specific means and methods.

Mr. Novak proposed to create more uniformity and establish uniform requirements that both satisfy environmental permitting agencies and allow contractors the most flexibility in the field, the proposed solution is a recurring special provision and recurring plan detail. The plan details outline the minimum requirements for flow, maximum elevations for the tops of causeways and acceptable materials. The recurring special provision includes reference to the permit, and associated applications, as well as payment details.

Mr. Koch mentioned that after the letting, if another method of causeway is elected delays may arise. Should a time statement be included? Mr. Blanchard responded that, in looking through the rest of the spec, remaining silent in regard to the time aspect seems to be the pattern.

Mr. White stated that he'd like to make a revision to this item, as shown in these minutes. We don't currently pay for temporary causeways directly unless a designer has done so under a USP, and he is concerned that doing so could have unintended consequences. For example, Mr. Lesh is aware of a project where a Contractor constructed a causeway not because it was necessary, but to be paid for constructing the causeway. I also think that adding this pay item for what is clearly Contractor means and methods could open the door to Contractors wanting to be paid directly for other means and methods. Mr. Osborn, ICI, asked about removing the pay item even though we have a unique pay item for this. Ms. Wagner confirmed what is stated above by Mr. White and that this was discussed during the Bridge ICI subcommittee meeting. Mr. Novak concurred with this revision.

There was no further discussion and this item passed as revised.

COMMENTS AND ACTION

205-B-XXX TEMPORARY CAUSEWAY (proposed new)
E 205-XXXX-01 true -04 TEMPORARY CAUSEWAY (proposed new)

[continued]

Motion: Mr. Novak Second: Mr. White Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** ___ Passed as Submitted _X_ Passed as Revised ___ Withdrawn
Standard Specifications Sections: NONE Recurring Special Provisions or Plan Details: (proposed new) Standard Drawing affected: (proposed new) Design Manual Chapter: NONE GIFE Section: 3.1 and 29	___ 2028 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP _X_ Create RSP (No. 205-B-326) Effective: December 1, 2025 ___ Revise RSP (No.___) Effective: TBD Standard Drawing Effective: _X_ Create RPD (No. 205-B-326d) Effective: December 1, 2025 _X_ GIFE Update ___ Frequency Manual Update ___ AWP Update