

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED:

Prior to [Construction Memo 07-23](#), concrete bridge decks and approaches could be poured continuously. Since after the memo, bridge decks and approaches were required to be poured separately due to the random cracking occurring around the 1-A joint, both during and after the pour. This caused the need for repairs that are both costly for the Contractor and detrimental to the expected life of the concrete.

As construction techniques and methods improved over the years, Industry Leadership expressed interest again in pouring the bridge deck and approaches monolithically together. As a result, the Department facilitated a pilot program for the past two years to review the impacts of the continuous deck pours. The pilot projects concluded that this method promotes a smoother ride between the deck and approach transition and eliminates two cold joints. Further, this method is quicker and more cost effective.

PROPOSED SOLUTION:

A specification change would allow the Designer of Record to review the Contractor's bridge deck pour sequence and determine if the structure can be poured monolithically. Determining factors include pouring the first span in less than 3.5 hours and the skew of the structure to be less than or equal to 45 degrees. A Design Memo is planned to be published to convey changes to the IDM and Bridge Design Aid 404-01. Furthermore, the revised Standard Drawings, E 609-RCBA-04, includes the requirements for an embedded steel angle component, that will keep the preformed expansion joint filler in place at the 1-A joint location across the structure. Further, A Construction Memo is planned to be published to supersede CM 07-23.

In addition, this specification change would be the first phase of a two phased plan to promote a smooth transition between the bridge deck and approaches. Starting in spring of 2024, the Department plans to start phase two where a smoothness requirement spec would be introduced to ensure rideability performance.

APPLICABLE STANDARD SPECIFICATIONS: SS 704.04

APPLICABLE STANDARD DRAWINGS: E 609-RCBA-04

APPLICABLE DESIGN MANUAL SECTION: IDM 404-2.06(02) Transverse Construction Joint

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: NA

PAY ITEMS AFFECTED: NA

[continued]

APPLICABLE SUB-COMMITTEE ENDORSEMENT: NA

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE:  
Required for all contracts with a 704-51002 Concrete, C, Superstructure pay item.

IMPACT ANALYSIS (attach report): Yes

Submitted By: Joe Novak

Title: State Construction Engineer

Division: Construction Management

E-mail: [jnovak@indot.in.gov](mailto:jnovak@indot.in.gov)

Date: 10/1/2023

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? Yes

Construction time? Yes

Customer satisfaction? No

Congestion/travel time? No

Ride quality? Yes

Will this proposal reduce operational costs or maintenance effort? Yes

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? No

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 2024 STANDARD SPECIFICATIONS AND STANDARD DRAWINGS

SECTION 704 - CONCRETE FLOOR SLABS  
704.04 Placing Reinforcement and Concrete

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 704, BEGIN LINE 34, DELETE AND INSERT AS FOLLOWS:

**704.04 Placing Reinforcement and Concrete**

Applicable provisions of 703 shall apply to placing reinforcing bars. No concrete shall be placed until the reinforcement is entirely and securely in place and has been inspected and approved. Walkways shall be in accordance with 702.20(a). Placing of reinforcement during placing of concrete will not be allowed without prior written approval. Splices, when allowed, shall be at locations of least tension in the steel.

The concrete deck pour sequence and procedure shall be submitted for approval a minimum of 14 days prior to the planned deck pour. The submittal shall include the following information:

- (a) the contract number
- (b) the Contractor's name
- (c) the bridge file number
- (d) the Contractor's proposed pour sequence
- (e) the Contractor's proposed pour rate
- (f) the approved concrete mix design
- (g) the delivery time from the concrete batching location to the jobsite.

Bridge approaches shall not be poured continuous with deck pours. *An exception will be considered when the bridge skew is less than or equal to 45 degrees and approved as part of the Contractor's concrete deck pour sequence. If the Contractor elects to pour the bridge approaches and deck continuously, the Contractor shall include the method of identifying type I-A joint locations as a part of the concrete deck pour sequence submittal.*

If, during the pour, the approved pour rate is not achieved, placement of transverse construction joints may be directed as shown on the plans. Placement of concrete shall be continuous between joints. Horizontal joints will not be allowed.

Floor drains shall be placed in gutters at locations shown on the plans and fastened securely before placing the surrounding concrete. The tops of the floor drains shall be no more than 1/2 in. below the adjacent gutter grade. The drains shall be constructed so drainage water is not discharged against portions of the structure.

Expansion joints shall be constructed as shown on the plans and the material shall be in accordance with 906.01.

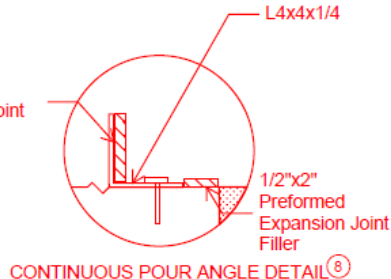
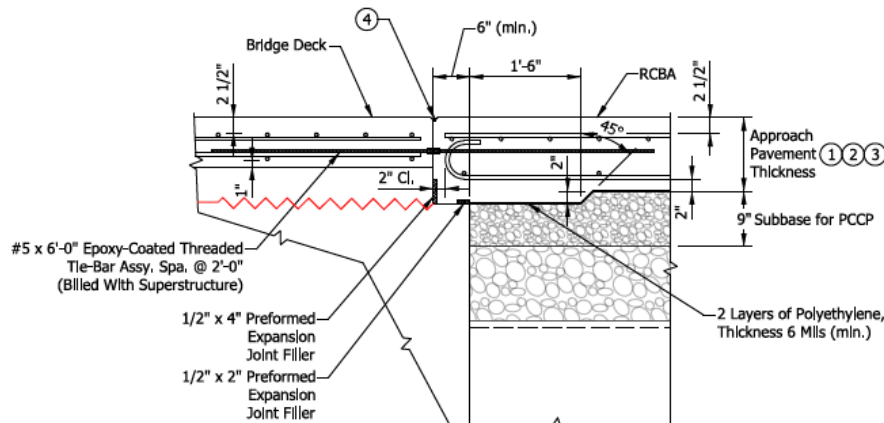
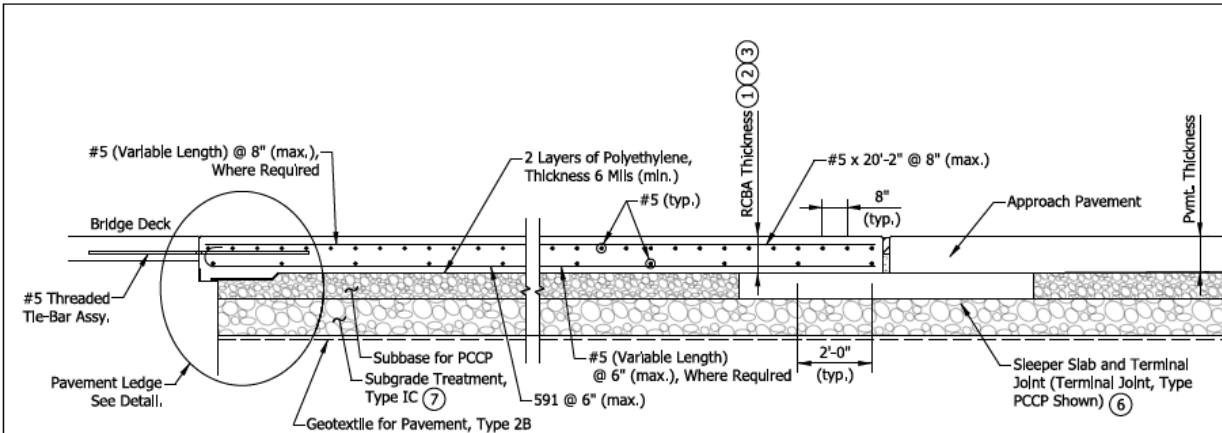
REVISION TO 2024 STANDARD SPECIFICATIONS AND STANDARD DRAWINGS

E 609-RCBA-04 REINFORCED CONCRETE BRIDGE APPROACH SECTION, PAVEMENT LEDGE, AND BAR BENDING DETAILS (shown markups)

NOTES:

- ① See plans for approach pavement thickness.
- ② For HMA approach pavement:  
RCBA = 10 in. If design year AADT < 1000  
RCBA = 12 in. If design year AADT ≥ 1000
- ③ For PCCP approach pavement:  
RCBA = 12 in. If pavement thickness < 12 in.  
RCBA = Same as pavement thickness, if pavement thickness ≥ 12 in.
- ④ See Standard Drawing series E 609-BRJT for joint type I-A details.
5. See Standard Drawing series E 703-BRST for reinforcing-bar bending details and notes.
- ⑥ When shown on the plans, see Standard Drawing series E 503-BATJ for terminal joint and sleeper slab details.
- ⑦ When the RCBA is constructed without a terminal joint, subgrade treatment shall be omitted and geotextile shall be placed under subbase for PCCP.
- ⑧ When the RCBA is poured continuous with the bridge deck, a contiguous angle shall be mechanically fastened to the full length of the pavement ledge using galvanized or stainless steel fasteners.

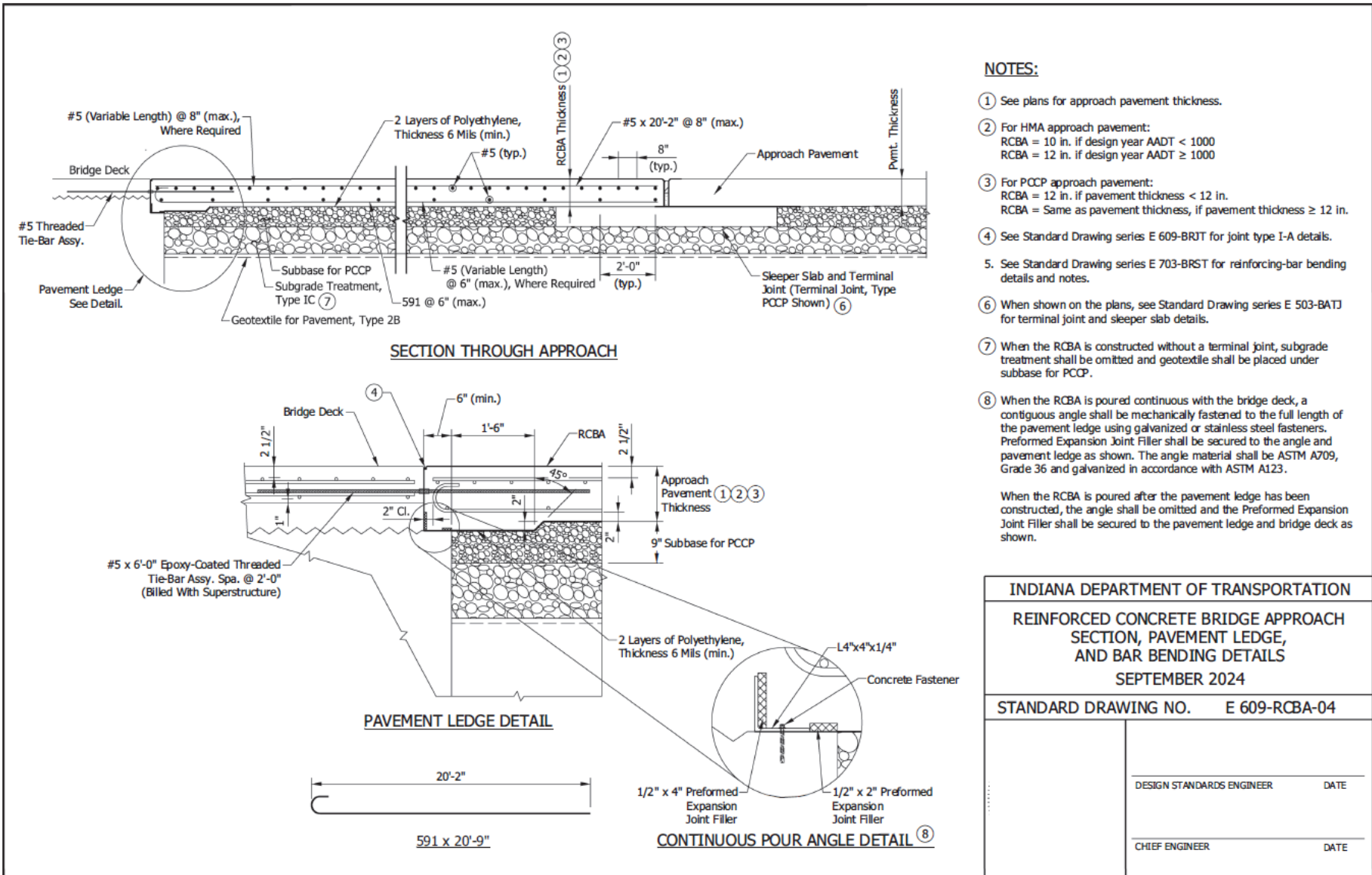
Preformed Expansion Joint Filler shall be secured to the angle and pavement ledge as shown. The angle material shall be ASTM A709, Grade 36 and galvanized in accordance with ASTM A123. When the RCBA is poured after the pavement ledge has been constructed, the angle shall be omitted and the Preformed Expansion Joint Filler shall be secured to the pavement ledge and bridge deck as shown.



INDIANA DEPARTMENT OF TRANSPORTATION	
REINFORCED CONCRETE BRIDGE APPROACH SECTION, PAVEMENT LEDGE, AND BAR BENDING DETAILS	
SEPTEMBER <del>2023</del> 2024	
STANDARD DRAWING NO. E 609-RCBA-04	
	Subhi Bazlamit 6/15/2022 DESIGN STANDARDS ENGINEER DATE
	06/27/2022 CHIEF ENGINEER DATE

REVISION TO 2024 STANDARD SPECIFICATIONS AND STANDARD DRAWINGS

E 609-RCBA-04 REINFORCED CONCRETE BRIDGE APPROACH SECTION, PAVEMENT LEDGE, AND BAR BENDING DETAILS (draft)



**NOTES:**

- ① See plans for approach pavement thickness.
- ② For HMA approach pavement:  
 RCBA = 10 in. if design year AADT < 1000  
 RCBA = 12 in. if design year AADT ≥ 1000
- ③ For PCCP approach pavement:  
 RCBA = 12 in. if pavement thickness < 12 in.  
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- ④ See Standard Drawing series E 609-BRJT for joint type I-A details.
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- ⑥ When shown on the plans, see Standard Drawing series E 503-BATJ for terminal joint and sleeper slab details.
- ⑦ When the RCBA is constructed without a terminal joint, subgrade treatment shall be omitted and geotextile shall be placed under subbase for PCCP.
- ⑧ When the RCBA is poured continuous with the bridge deck, a contiguous angle shall be mechanically fastened to the full length of the pavement ledge using galvanized or stainless steel fasteners. Preformed Expansion Joint Filler shall be secured to the angle and pavement ledge as shown. The angle material shall be ASTM A709, Grade 36 and galvanized in accordance with ASTM A123.  
  
 When the RCBA is poured after the pavement ledge has been constructed, the angle shall be omitted and the Preformed Expansion Joint Filler shall be secured to the pavement ledge and bridge deck as shown.

<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>	
<b>REINFORCED CONCRETE BRIDGE APPROACH SECTION, PAVEMENT LEDGE, AND BAR BENDING DETAILS</b>	
<b>SEPTEMBER 2024</b>	
STANDARD DRAWING NO.	E 609-RCBA-04
DESIGN STANDARDS ENGINEER	DATE
CHIEF ENGINEER	DATE

COMMENTS AND ACTION

704.04 Placing Reinforcement and Concrete

E 609-RCBA-04 REINFORCED CONCRETE BRIDGE APPROACH SECTION, PAVEMENT LEDGE, AND BAR BENDING DETAILS

DISCUSSION:

Motion:	<b>Action:</b>
Second:	<input type="checkbox"/> Passed as Submitted
Ayes:	<input type="checkbox"/> Passed as Revised
Nays:	<input type="checkbox"/> Withdrawn
FHWA Approval:	
2024 Standard Specifications Sections: 704.04 pg. 654.	<input type="checkbox"/> 2026 Standard Specifications
Recurring Special Provisions or Plan Details: NONE	<input type="checkbox"/> Revise Pay Items List
Standard Drawing affected: E 609-RCBA-04 REINFORCED CONCRETE BRIDGE APPROACH SECTION, PAVEMENT LEDGE, AND BAR BENDING DETAILS	<input type="checkbox"/> Notification to Designers if change is <u>not</u> addressed by RSP
Design Manual Chapter: NONE	<input type="checkbox"/> Create RSP (No. __) Effective:
GIFE Section: TBD	<input type="checkbox"/> Revise RSP (No. __) Effective:
	<input type="checkbox"/> Standard Drawing Effective:
	<input type="checkbox"/> Create RPD (No. __) Effective:
	<input type="checkbox"/> GIFE Update
	<input type="checkbox"/> Frequency Manual Update
	<input type="checkbox"/> SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Testing difficulty and inefficiency of process for base metal samples.

PROPOSED SOLUTION: Create an alternative route of approval for Corrugated Metal Pipe, align with Corrugated Thermoplastic Pipe

APPLICABLE STANDARD SPECIFICATIONS: 715, 907, 908

APPLICABLE STANDARD DRAWINGS: None

APPLICABLE DESIGN MANUAL SECTION: NA

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: create new 715 RSP

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ad hoc: Jon Korff, Jim Reilman

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE:  
All contracts with 715 or 717 pay items.

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman for Jonathan Korff

Title: State Materials Engineer

Division: Division of Materials and Tests

E-mail: jreilman@indot.IN.gov

Date: 11/6/23



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? N/A

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? N/A

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 STANDARD SPECIFICATIONS

- SECTION 715 – PIPE CULVERTS, AND STORM AND SANITARY SEWERS
- 715.02 Materials
- SECTION 907 – CONCRETE, CLAY, AND PLASTIC DRAINAGE COMPONENTS
- 907.16 Thermoplastic Pipe Requirements
- 907.17 Corrugated Polyethylene Drainage Tubing and Pipe
- SECTION 908 – METAL PIPE
- 908.01 ~~Blank~~ Metal Pipe Requirements

(Note: Proposed changes shown highlighted gray and previously approved changes (see July 20, 2023 SC meeting) – shaded and are in special provision [715-R-614](#) eff. 12-01-2023.)

The Standard Specifications are revised as follows:

SECTION 715, BEGIN LINE 41, DELETE AND INSERT AS FOLLOWS:

**(a) Type 1 Pipe**

Type 1 pipe shall be used for culverts under mainline pavement and public road approaches and shall be in accordance with the following:

Clay Pipe, Extra Strength.....	907.08
Corrugated Aluminum Alloy Pipe and Pipe-Arches.....	908.04 <sup>B</sup>
Corrugated Polyethylene Pipe, Type S .....	* <sup>A</sup>
Corrugated Polypropylene Pipe .....	* <sup>A</sup>
Corrugated Steel Pipe and Pipe-Arches .....	908.02 <sup>B</sup>
Non-Reinforced Concrete Pipe, Class 3.....	907.01
Polymer Precoated Galvanized Corrugated Steel Pipe and Pipe-Arches.....	908.08 <sup>B</sup>
Profile Wall Polyethylene Pipe, Closed.....	* <sup>A</sup>
Profile Wall Polyethylene Pipe, Ribbed.....	* <sup>A</sup>
Profile Wall PVC Pipe .....	* <sup>A</sup>
Reinforced Concrete Horizontal Elliptical Pipe.....	907.03
Reinforced Concrete Pipe .....	907.02
Smooth Wall Polyethylene Pipe.....	* <sup>A</sup>
Smooth Wall PVC Pipe.....	* <sup>A</sup>
Spiral Rib Steel Pipe .....	908.02 <sup>B</sup>
Structural Plate Pipe and Pipe-Arches .....	908.09 <sup>B</sup>

\*<sup>A</sup> All thermoplastic pipes shall be from the QPL of Thermoplastic Pipe and Liner Pipe Sources in accordance with 907.16.

<sup>B</sup> All metal pipes shall be from the QPL of Metal Pipe Sources in accordance with 908.01.

**(b) Type 2 Pipe**

Type 2 pipe shall be used for storm sewers and shall be in accordance with the following:

Clay Pipe, Extra Strength.....	907.08
Corrugated Polyethylene Pipe, Type S .....	* <sup>A</sup>
Corrugated Polypropylene Pipe .....	* <sup>A</sup>
Fully Bituminous Coated and Lined Corrugated Steel Pipe and Pipe-Arches.....	908.07 <sup>B</sup>

REVISION TO STANDARD SPECIFICATIONS

SECTION 715 – PIPE CULVERTS, AND STORM AND SANITARY SEWERS

715.02 Materials

SECTION 907 – CONCRETE, CLAY, AND PLASTIC DRAINAGE COMPONENTS

907.16 Thermoplastic Pipe Requirements

907.17 Corrugated Polyethylene Drainage Tubing and Pipe

SECTION 908 – METAL PIPE

908.01 ~~Blank~~ Metal Pipe Requirements

Non-Reinforced Concrete Pipe, Class 3.....907.01

Polymer Precoated Galvanized Corrugated Steel

Pipe and Pipe-Arches Type IA and Type IIA.....908.08<sup>B</sup>

Profile Wall Polyethylene Pipe, Closed .....\*<sup>A</sup>

Profile Wall Polyethylene Pipe, Ribbed.....\*<sup>A</sup>

Profile Wall PVC Pipe .....\*<sup>A</sup>

Reinforced Concrete Horizontal Elliptical Pipe.....907.03

Reinforced Concrete Pipe .....907.02

Smooth Wall Polyethylene Pipe.....\*<sup>A</sup>

Smooth Wall PVC Pipe.....\*<sup>A</sup>

<sup>A</sup> All thermoplastic pipes shall be from the QPL of Thermoplastic Pipe and Liner Pipe Sources in accordance with 907.16.

<sup>B</sup> All metal pipes shall be from the QPL of Metal Pipe Sources in accordance with 908.01.

**(c) Type 3 Pipe**

Type 3 pipe shall be used for culverts under all drives and field entrances. All Type 1 pipe materials are acceptable.

**(d) Type 4 Pipe**

Type 4 pipe shall be used for drain tile and longitudinal underdrains and shall be in accordance with the following:

Clay Pipe\*\*.....907.08

Corrugated Polyethylene Drainage Tubing.....\*<sup>A</sup>

Corrugated Polyethylene Pipe, Type S\*\*.....\*<sup>A</sup>

Corrugated Polyethylene Pipe, Type SP.....\*<sup>A</sup>

Drain Tile\*\*.....907.10

Non-Reinforced Concrete Pipe .....907.01

Perforated Clay Pipe\*\*.....907.09

Perforated PVC Semicircular Pipe.....\*<sup>A</sup>

Profile Wall PVC Pipe .....\*<sup>A</sup>

<sup>A</sup> All thermoplastic pipes shall be from the QPL of Thermoplastic Pipe and Liner Pipe Sources in accordance with 907.16.

\*\* These materials shall be used for drain tiles only.

**(e) Type 5 Pipe**

Type 5 pipe shall be used for broken-back pipe runs where coupled or jointed pipe is desirable and shall be in accordance with the following:

Corrugated Aluminum Alloy Pipe and Pipe-Arches.....908.04<sup>B</sup>

Corrugated Polyethylene Pipe, Type S .....\*<sup>A</sup>

REVISION TO STANDARD SPECIFICATIONS

SECTION 715 – PIPE CULVERTS, AND STORM AND SANITARY SEWERS  
 715.02 Materials  
 SECTION 907 – CONCRETE, CLAY, AND PLASTIC DRAINAGE COMPONENTS  
 907.16 Thermoplastic Pipe Requirements  
 907.17 Corrugated Polyethylene Drainage Tubing and Pipe  
 SECTION 908 – METAL PIPE  
 908.01 ~~Blank~~ Metal Pipe Requirements

Corrugated Polypropylene Pipe .....	* <sup>A</sup>
Corrugated Steel Pipe and Pipe-Arches .....	908.02 <sup>B</sup>
Fully Bituminous Coated and Lined Corrugated Steel Pipe and Pipe-Arches .....	908.07 <sup>B</sup>
Polymer Precoated Galvanized Corrugated Steel Pipe and Pipe-Arches .....	908.08 <sup>B</sup>
Profile Wall Polyethylene Pipe, Closed .....	* <sup>A</sup>
Profile Wall Polyethylene Pipe, Ribbed.....	* <sup>A</sup>
Profile Wall PVC Pipe .....	* <sup>A</sup>
Smooth Wall Polyethylene Pipe.....	* <sup>A</sup>
Smooth Wall PVC Pipe.....	* <sup>A</sup>
Spiral Rib Steel Pipe .....	908.02 <sup>B</sup>

\*<sup>A</sup> All thermoplastic pipes shall be from the QPL of Thermoplastic Pipe and Liner Pipe Sources in accordance with 907.16.

<sup>B</sup> All metal pipes shall be from the QPL of Metal Pipe Sources in accordance with 908.01.

SECTION 907, BEGIN LINE 216, DELETE AND INSERT AS FOLLOWS:

**907.16 Thermoplastic Pipe Requirements**

A QPL of ~~Thermoplastic Pipe~~ and ~~Liner Pipe~~ *Sources* will be maintained by the Department. The QPL will specify the manufacturer and thermoplastic pipe designation. All of these materials shall comply with the applicable AASHTO or ASTM requirements listed in the following table and will only be accepted from qualified manufacturers. The manufacturer is defined as the plant which produces the thermoplastic pipe. The manufacturer shall become qualified by establishing a history of satisfactory quality control of these materials as evidenced by the test results performed by the manufacturer’s testing laboratory.

Summary of Thermoplastic Pipe Specification Requirements				
Pipe Material	Standard Specification	AASHTO	ASTM	Manufacturer Requirement
Corrugated Polyethylene Drainage Tubing	907.17(a)	M 252		ITM 806, Procedure O
Corrugated Polyethylene Pipe	907.17(b)	M 294*		ITM 806, Procedure O
Corrugated Polypropylene Pipe	907.19	M 330		ITM 806, Procedure O
Perforated PVC Semicircular Pipe	907.18		D3034	ITM 806, Procedure A
Profile Wall HDPE Liner Pipe	907.25(b)		F894	ITM 806, Procedure A or 916, Type A Certification

## REVISION TO STANDARD SPECIFICATIONS

## SECTION 715 – PIPE CULVERTS, AND STORM AND SANITARY SEWERS

## 715.02 Materials

## SECTION 907 – CONCRETE, CLAY, AND PLASTIC DRAINAGE COMPONENTS

## 907.16 Thermoplastic Pipe Requirements

## 907.17 Corrugated Polyethylene Drainage Tubing and Pipe

## SECTION 908 – METAL PIPE

908.01 ~~Blank~~ Metal Pipe Requirements

Profile Wall PVC Liner Pipe	907.25(c)		F949	ITM 806, Procedure A or 916, Type A Certification
Profile Wall PVC Pipe	907.22 907.24(c)	M 304		ITM 806, Procedure O
Profile Wall Polyethylene Pipe	907.20		F894	ITM 806, Procedure A
<del>Schedule 40</del> PVC Plastic Pipe, Schedule 40	907.24(b)		D1785 or <del>D2665</del>	916, Type C Certification
<i>Slotted Vane Drain Pipe</i>	<del>908.14</del>	<del>M 278</del>	<del>F679</del>	<del>ITM 806, Procedure A</del>
Smooth Wall Polyethylene Pipe	907.21 907.24(d)		F714	ITM 806, Procedure A
Smooth Wall PVC Pipe	907.23 907.24(e)	M 278	F679	ITM 806, Procedure A
Solid Wall HDPE Liner Pipe	907.25(a)		F714	ITM 806, Procedure Q or 916, Type A Certification
Type PSM PVC Pipe and Fittings	907.24(a)		D3034	ITM 806, Procedure A
* Pipe in accordance with AASHTO M 294 shall be manufactured with virgin materials.				

SECTION 908, BEGIN LINE 3, DELETE AND INSERT AS FOLLOWS:

**908.01 ~~Blank~~ Metal Pipe Requirements**

*A QPL of Metal Pipe Sources will be maintained by the Department. The QPL will specify the manufacturer and pipe designation. All of these materials shall comply with the applicable AASHTO or ASTM requirements listed in the following table and will only be accepted from qualified manufacturers. The manufacturer is defined as the plant which produces the metal pipe, pipe-arch, or arch. The manufacturer shall establish and maintain a history of satisfactory quality control of these materials. This history will be based on achieving and maintaining a "Compliant" status with the AASHTO PEAS program in accordance with ITM 806, Procedure O.*

Summary of Metal Pipe Specification Requirements				
Pipe Material	Standard Specification	AASHTO	ASTM	Manufacturer Requirement
Cast Iron Soil Pipe	908.10		A74	Buy America Certification
Corrugated Aluminum Alloy	908.04	M 196		ITM 806,

## REVISION TO STANDARD SPECIFICATIONS

## SECTION 715 – PIPE CULVERTS, AND STORM AND SANITARY SEWERS

## 715.02 Materials

## SECTION 907 – CONCRETE, CLAY, AND PLASTIC DRAINAGE COMPONENTS

## 907.16 Thermoplastic Pipe Requirements

## 907.17 Corrugated Polyethylene Drainage Tubing and Pipe

## SECTION 908 – METAL PIPE

908.01 ~~Blank~~ Metal Pipe Requirements

<i>Pipe and Pipe-Arches</i>				<i>Procedure O</i>
<i>Corrugated Steel Pipe and Pipe-Arches</i>	908.02	M 36		ITM 806, Procedure O
<i>Fully Bituminous Coated Corrugated and Lined Steel Pipe and Pipe-Arches</i>	908.07	M 36		ITM 806, Procedure O
<i>Polymer Precoated Galvanized Corrugated Steel Culvert Pipe and Pipe-Arches</i>	908.08	M 245		ITM 806, Procedure O
<i>Slotted Drain Pipe</i>	908.14	pipe: M 36	grate: A36, Grade 36	ITM 806, Procedure O
<i>Steel Pipe</i>	908.11		A139, grade B or A53 Type E, grade B	ITM 806, Procedure O
<i>Structural Plate Pipe, Pipe-Arches, and Arches; Aluminum Alloy</i>	908.09(b)	M 219		ITM 806, Procedure O
<i>Structural Plate Pipe, Pipe-Arches, and Arches; Steel</i>	908.09(a)	M 167 and LRFD Bridge Construction Specifications		ITM 806, Procedure O

**908.02 Corrugated Steel Pipe and Pipe-Arches**

Corrugated steel pipe and pipe-arches shall be type I, IA, IR, II, or IIA in accordance with AASHTO M 36.

COMMENTS AND ACTION

- 715.02 Materials
- 907.16 Thermoplastic Pipe Requirements
- 907.17 Corrugated Polyethylene Drainage Tubing and Pipe
- 908.01 ~~Blank~~ Metal Pipe Requirements

DISCUSSION:

<p>Motion:</p> <p>Second:</p> <p>Ayes:</p> <p>Nays:</p> <p>FHWA Approval:</p>	<p><b>Action:</b></p> <p><input type="checkbox"/> Passed as Submitted</p> <p><input type="checkbox"/> Passed as Revised</p> <p><input type="checkbox"/> Withdrawn</p>
<p>2024 Standard Specifications Sections:</p> <p style="text-align: center;">NONE</p> <p>Recurring Special Provisions or Plan Details:</p> <p style="text-align: center;">715-R-764 PIPE CULVERTS, AND STORM AND SANITARY SEWERS</p> <p>Standard Drawing affected:</p> <p style="text-align: center;">NONE</p> <p>Design Manual Chapter:</p> <p style="text-align: center;">NONE</p> <p>GIFE Section:</p> <p style="text-align: center;">NONE</p>	<p><input type="checkbox"/> 2026 Standard Specifications</p> <p><input type="checkbox"/> Revise Pay Items List</p> <p><input type="checkbox"/> Notification to Designers if change is <u>not</u> addressed by RSP</p> <p><input type="checkbox"/> Create RSP (No. __) Effective:</p> <p><input type="checkbox"/> Revise RSP (No. __) Effective:</p> <p><input type="checkbox"/> Standard Drawing Effective:</p> <p><input type="checkbox"/> Create RPD (No. __) Effective:</p> <p><input type="checkbox"/> GIFE Update</p> <p><input type="checkbox"/> Frequency Manual Update</p> <p><input type="checkbox"/> SiteManager Update</p>