INDIANA DEPARTMENT OF TRANSPORTATION
100 North Senate Avenue
Room N758 CM
Indianapolis, Indiana 46204
www.in.gov/indot
Eric Holcomb, Governor
Mike Smith, Commissioner

FINAL DRAFT MINUTES

July 18, 2024, Standards Committee Meeting

(Changes to the Agenda by the Action of the Committee shown as highlighted yellow, unless otherwise indicated. Changes to the First Draft Minutes shown highlighted green and are on pg. 23)

August 8, 2024

TO: Standards Committee

FROM: Scott Trammell, Secretary

RE: Minutes from the July 18, 2024, Standards Committee Meeting

The Standards Committee meeting was called to order by Mr. Pankow, Chair, at 09:00 a.m. on Thursday, July 18, which was held virtually via *Teams* (Microsoft application). The meeting was adjourned at 9:54 a.m.

The following committee members were in attendance:

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

Also, the following attendees were present:

Awwad, Nathan, INDOT
Barney, Bruce, INDOT
Blanchard, Jacob, INDOT
Coffin, Delaney, INDOT
Cruz, Elena, INDOT
Kreutzjans, Gary, INDOT
Lamkin, Sara, INDOT
Perugu, Kshitija, INDOT
Pinkstaff, Andrew, INDOT
Plant, William, INDOT

Delp, Patrick, INDOT
Duncan, Thomas (FHWA)
Fisher, Steve, INDOT
Fox, Gary, INDOT
Galetka, Jason, INDOT
Hailat, Mahmoud, INDOT
Harding, Matthew, INDOT
Harris, Tom, INDOT
Hauser, Derrick, INDOT
Jacobs, David, INDOT
Podorvanova, Lana, INDOT
Rizzo, Calvin J, INDOT
Sharp, Matthew, CONTECH
Shi, Runfa, INDOT
Siddiki, Nayyar Zia, INDOT
Smart, Steve, guest
Thornton, Donald, INDOT
Trammell, Scott, INDOT
Yoon, Sung Min (Sean), INDOT

The following items were discussed:

A. GENERAL BUSINESS

OLD BUSINESS *(No items were listed)*

NEW BUSINESS

1. *Approval of the Minutes from the June 20 meeting*

Mr. Pankow requested a motion to approve the Minutes from the June 20, 2024 meeting.

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

ACTION: PASSED AS SUBMITTED

B. CONCEPTUAL PROPOSAL

Update INDOT Standard Specifications and RSPs by replacing every occurrence of "fly ash" with "coal ash" to match with the industry's use of terms.....J. Reilman..... pg. 5

Note: Mr. Reilman has indicated that these changes are necessary and are editorial. Every occurrence of "fly ash" will be replaced with "coal ash". These edits will be made and shown in various sections of the 2026 Standard Specifications and affected Recurring Special provisions that will be effective on or after September 1, 2025 lettings.

C. STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND STANDARD DRAWINGS PROPOSAL

OLD BUSINESS

Item No. 3 (4/18/24) Mr. White pg. 6
2024 Standard Specifications:

703.06	Placing and Fastening
703.08	Basis of Payment

ACTION: PASSED AS SUBMITTED

NEW BUSINESS

Item No. 1 — Mr. Novak — pg. 11

Recurring Special Provision:

107-R-169	STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

ACTION: TBD [at the next SC meeting]

Item No. 2 — Mr. Wooden — pg. 21

2024 Standard Specifications:

621.14	Basis of Payment

ACTION: PASSED AS SUBMITTED

Item No. 3 — Mr. Wooden — pg. 25

2024 Standard Specifications:

101.80	*Joint Ventures*

ACTION: PASSED AS SUBMITTED

Item No. 4 — Mr. Reilman — pg. 29

2024 Standard Specifications:

109.01	Measurement of Quantities

ACTION: PASSED AS SUBMITTED

Item No. 5 — Mr. Reilman — pg. 34

2024 Standard Specifications:

SECTION 301	AGGREGATE BASE

ACTION: WITHDRAWN

Item No. 6 — Mr. Reilman — pg. 40

2024 Standard Specifications:

SECTION 303	AGGREGATE PAVEMENTS OR SHOULDERS

ACTION: WITHDRAWN

Item No. 7 Mr. Reilman pg. 45

2024 Standard Specifications:

905.05 Detectable Warning Surfaces

ACTION: WITHDRAWN

Item No. 8 Mr. Reilman pg. 50

2024 Standard Specifications:

203.18 Embankment Construction

ACTION: WITHDRAWN

Item No. 9 Mr. Reilman pg. 55

2024 Standard Specifications:

715.02 Materials
907.16 Thermoplastic Pipe Requirements
908.01 ~~Blank~~*Metal Pipe Requirements*

ACTION: PASSED AS SUBMITTED

cc: Committee Members
FHWA
ICI

CONCEPTUAL PROPOSAL

PROBLEM(S) ENCOUNTERED: industry has changed from using the term “fly ash” to using “coal ash”.

PROPOSED SOLUTION: update the Standard Specifications and RSPs by replacing every occurrence of “fly ash” with “coal ash”.

APPLICABLE STANDARD SPECIFICATIONS: several sections

APPLICABLE STANDARD DRAWING: none

APPLICABLE DESIGN MANUAL CHAPTER:

APPLICABLE SECTION OF GIFE: 8.2, 8.17

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: The RSP library should also be checked.

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: N/A

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

IMPACT ANALYSIS (attach report): N/A

Submitted By: Jim Reilman

Title: State Materials Engineer

Division: Materials and Tests

E-mail: jreilman@indot.in.gov

Date: 6/14/24

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The *Standard Specifications* currently don't provide requirements for maximum spacing of support devices or spacers used to support reinforcing bars. The Department has recently observed honeycombing on the underside of reinforced concrete slabs, and ground penetrating radar, GPR, results indicating top cover thickness which varied significantly from plan. These are indications that the spacing of support devices may have been too large, resulting in displacement of the reinforcing bars during the placement of concrete.

PROPOSED SOLUTION: Revise section 703 to provide an upper limit on the spacing of support devices, and explicitly allow bent reinforcing bars to be used as support devices.

APPLICABLE STANDARD SPECIFICATIONS: 703.06, 703.08

APPLICABLE STANDARD DRAWING: N/A

APPLICABLE DESIGN MANUAL CHAPTER: 405, 406 (will be updated upon approval of specification change)

APPLICABLE SECTION OF GIFE: 5.12 (no changes anticipated)

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: N/A

PAY ITEMS AFFECTED: N/A

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc committee including Mike Nelson, Andrew Pinkstaff, and Jim Reilman.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: All contracts that include 703 pay items

IMPACT ANALYSIS (attach report):

Submitted By: Pete White

Title: Design Manager

Division: INDOT Bridge Engineering

E-mail: pewhite@indot.in.gov

Date: April 5, 2024

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? No
- Congestion/travel time? No
- Ride quality? No

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? Yes
- Design process? Yes

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:

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 703, BEGIN LINE 52, DELETE AND INSERT AS FOLLOWS:

703.06 Placing and Fastening

Reinforcing bars shall not be ordered for piers or bents to be founded on soil or rock until the foundation conditions have been investigated. The bottom elevations of such footings will then be determined. Written permission will then be given to order such reinforcing bars. Sufficient excavation and all necessary soundings shall be made as directed so that exact bottom elevations of footings may be determined.

All dimensions shown on the plans for spacing of reinforcing bars apply to centers of bars unless otherwise noted. All bars shall be accurately placed and, during placing of the concrete, held firmly in the position as shown on the plans. Distances from the forms shall be maintained by means of chairs, ties, hangers, or other approved support devices. All reinforcing bars shall be wired rigidly or fastened securely at sufficient intervals to hold the bars in place. *Welding of reinforcing bars shall not be performed.* Epoxy coated reinforcing bars shall be tied with epoxy coated or plastic coated tie wire. ~~Chairs and supports holding upper layers of reinforcing bars shall support the transverse bars.~~ The upper layer and lower layer of reinforcing bars in RCBAs and bridge floors shall be tied or fastened at a minimum of every other intersection of the longitudinal and transverse bars to prevent an upward or a lateral movement of a bar from the planned position.

Layers of reinforcing bars shall be separated by ~~spacers~~*support devices in accordance with 910.01(b)11 or epoxy coated reinforcing bars. Epoxy coated reinforcing bars used to separate and support layers of reinforcing bars shall be shop bent to the dimensions required to secure the layers of reinforcing bars in the positions shown on the plans. The size and spacing of support devices or epoxy coated reinforcing bars used as supports shall be such that the plan reinforcing bars are not displaced by the weight of the concrete, upper layers of reinforcing bars, or construction loads, but in no case shall the spacing exceed 4 ft in any direction.* Reinforcing bars shall be separated from horizontal surfaces by being suspended or supported on approved ~~chairs and spacers~~*support devices* capable of supporting the designed loads. Supports and spacers shall be of such shape as to be easily encased in concrete. That portion which is in contact with the forms shall be non-corrosive and non-staining material. They shall be of an approved type. ~~Vertical stirrups shall always pass around main tension members and shall be securely attached thereto.~~ The use of pebbles, pieces of broken stone or bricks, metal pipe, wooden blocks, and similar devices for holding bars in position will not be allowed.

SECTION 703, BEGIN LINE 132, DELETE AND INSERT AS FOLLOWS:

703.08 Basis of Payment

The accepted quantities of reinforcing bars will be paid for at the contract price per pound, complete in place.

If the substitution of reinforcing bars larger than those specified is allowed, payment will be made for only that weight which would be required if the specified bars had been used.

If the use of reinforcing bar lengths shorter than those shown on the plans is allowed for convenience in transporting or placing the bars, payment will be based on the weight of the lengths shown on the plans.

Payment for threaded tie bar assemblies will be at the contract unit price per each, complete in place. If epoxy coating is specified, payment for the assemblies will be at the contract unit price per each for threaded tie bar assembly, epoxy coated.

Payment will be made under:

Pay Item	**Pay Unit Symbol**
Reinforcing Bars	LBS
Reinforcing Bars, Epoxy Coated	LBS
Threaded Tie Bar Assembly	EACH
Threaded Tie Bar Assembly, Epoxy Coated	EACH

The cost of ~~metal chairs~~*support devices or epoxy coated reinforcing bars used as supports*, spacers, clips, wire, or other mechanical means used for fastening or holding reinforcement in place, and laps shall be included in the cost of reinforcing bars. The cost of coating materials and repair of damaged or removed coating materials on reinforcing bars and on metal chairs, spacers, clips, or other mechanical means used for fastening or holding reinforcement in place, and laps shall be included in the cost of epoxy coated reinforcing bars. If threaded tie bar assemblies are used in lieu of spliced reinforcing bars as shown on the plans, the cost of such assemblies shall be included in the cost of reinforcing bars.

If WWR is required, the cost of furnishing and placing shall be included in the cost of the concrete in which it is placed.

COMMENTS AND ACTION

703.06 Placing and Fastening
703.08 Basis of Payment

DISCUSSION:
Mr. White introduced and presented this item stating that the Standard Specifications currently don't provide requirements for maximum spacing of support devices or spacers used to support reinforcing bars. The Department has recently observed honeycombing on the underside of reinforced concrete slabs, and ground penetrating radar, GPR, results indicating top cover thickness which varied significantly from the plans. These are indications that the spacing of support devices may have been too large, resulting in displacement of the reinforcing bars during the placement of concrete.

Mr. White proposed to revise section 703 to provide an upper limit on the spacing of support devices, and to explicitly allow bent reinforcing bars to be used as support devices.

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
2024 Standard Specifications Sections: 703.06 pg. 650; 703.08 pg. 652. Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	X 2026 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP __ Create RSP (No._) Effective: ___ Revise RSP (No.___) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: X GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: The existing RSP 107-R-169 template provides little detail regarding utilities in the project area and utility relocations. Therefore, this information is often left out or added in non-standard format causing complications and confusion in construction.

There are also sections of the RSP 107-R-169 for right-of-way and encroachments. The submitter of the RSP is typically the utility coordinator who knows little about right-of-way or encroachments on the project. Therefore, this section is often left blank, excluded entirely, or includes inaccurate information, leaving contracts responsible to update the information following submission.

PROPOSED SOLUTION: The utility section of the RSP was updated to provide more information regarding each utility and more scenarios of relocations and schedules.

The location for detail of right-of-way and encroachments within the RSP was removed and replaced with stock language requiring the contractor to reference the right-of-way certification for information regarding right-of-way and rights of entry. The right-of-way certification will be uploaded as an additional contract document for bidders. Encroachments will be excluded from the RSP as the RSP is typically inaccurate regarding the encroachments. Detail will be and typically already is included in the plans and other specifications to detail what the contractor is responsible for related to encroachments.

APPLICABLE STANDARD SPECIFICATIONS: 103, 104, 105, 107, 108, 201, 202, 203, 725, 731, 732, 805, and 807 but no revisions necessary.

APPLICABLE STANDARD DRAWING: n/a

APPLICABLE DESIGN MANUAL CHAPTER: Chapters 85 (Right-of-Way Plans Preparation) and 104 (Utility Coordination) but no revisions necessary.

APPLICABLE SECTION OF GIFE: Sections 2 (General Instructions) and 14 (Utility Relocation Inspection Procedures) but no revisions necessary.
APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: RSP 107-R-169
PAY ITEMS AFFECTED: n/a

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Division of Utilities and Railroad (Sam Anderson, Bill Plant) consulted with INDOT Divisions of Contract Administration, Real Estate, and Legal Services.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Same as existing, Place in All Contracts.

IMPACT ANALYSIS (attach report): attached

Submitted By: Joe Novak for Bill Plant, Utility and Railroad Manager
Title: State Construction Engineer
Division: Construction Management
E-mail: jnovak@indot.in.gov
Date: 6/27/24

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? 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? no
- Asset preservation? no
- 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? 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: Revising this RSP template will provide clarity and standardization regarding utility and right-of-way impacts on a project. It will reduce the amount of times the 107 will need revised, the amount of people involved in completing and ultimately create more accuracy.

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

(Note: Proposed changes to currently used RSP additions are shown highlighted gray and deletions – strikethrough and highlighted gray)

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

(Revised 05-20-23)

The Standard Specifications are revised as follows:

SECTION 107, AFTER LINE 762, INSERT AS FOLLOWS:

107.26 Existing Conditions of Utilities, Additional Right-of-Way, and Encroachments

Such existing conditions are as described below.

Des Number(s) - Can be Multiple if Coordination was Treated as One Project}
{Roadway Name and Location}

[**NOTE TO THE UTILITY COORDINATOR -** ONLY INCLUDE SECTION (a) BELOW IF LIMITED UTILITY INVOLVEMENT WAS DONE FOR THE PROJECT AND A FULL OR PARTIAL LIMITED CERTIFICATION WAS USED. ADD APPLICABLE COMPLETED PARAGRAPHS BELOW IT FOR UTILITIES THAT FULL COORDINATION WAS STILL REQUIRED. REMOVE THIS NOTE TO THE UTILITY COORDINATOR PRIOR TO SUBMITTING.]

(a) Utilities

Although there may be utilities in the project area, utilities received little to no contact regarding this project as it is not anticipated that utilities will be affected by the project except as described below. The Contractor shall use caution and shall follow safety precautions when digging, excavating, or working near utility lines.

[**NOTE TO THE UTILITY COORDINATOR -** ONLY INCLUDE SECTION (a) BELOW IF **NO** UTILITY COMPANIES ARE LOCATED NEAR THE PROJECT LIMITS. REMOVE THIS NOTE TO THE UTILITY COORDINATOR PRIOR TO SUBMITTING.]

(a) Utilities

There is no known involvement of utility companies or organizations located within the project limits. The Contractor shall use caution and follow all safety precautions when digging, excavating, or working, in case there are utilities not discovered or disclosed during the pre-construction utility investigation for this project.

[**NOTE TO THE UTILITY COORDINATOR -** ONLY INCLUDE SECTION (a) BELOW WITH A COMPLETED APPLICABLE PARAGRAPH FOR EACH UTILITY IDENTIFIED AS A PART OF THE PROJECT IF FULL COORDINATION WAS DONE ON THE PROJECT. REMOVE THIS NOTE TO THE UTILITY COORDINATOR PRIOR TO SUBMITTING.]

(a) Utilities

The status of all utility companies and organizations potentially involved with the work to be performed are described below as ~~know at~~of the time this contract was prepared.

The facilities of _____ exist within the project limits, but are not expected to be affected by the proposed construction. If questions arise, _____ of the utility may be contacted at _____-_____-_____.

The facilities of _____ exist within the project limits. Their facilities have been adjusted to accommodate construction. If questions arise, _____ of the utility may be contacted at _____-_____-_____.

The facilities of _____ exist within the project limits. It is anticipated that they will adjust their facilities for construction on or before _____, 20_____. If questions arise, _____ of the utility may be contacted at _____-_____-_____.

The facilities of _____ exist within the project limits. The utility will be able to complete its involvement with the contract when the Contractor has completed _____ in the location of _____ such that the utility may adjust its facilities. It is anticipated that the utility will take approximately _____ calendar days to adjust its facilities in such area. If questions arise, _____ of the utility may be contacted at _____-_____-_____.

(b) Right-of-Way

There is no involvement of additional right-of-way for the contract.

(b) Right-of-Way

All additional right-of-way requirements for the contract have been cleared.

(b) Right-of-Way

All additional right-of-way requirements for the contract have been cleared except for the conditions at the parcels described below.

1. Occupied Parcels

The buildings existing on the parcels listed below are still occupied. Demolition of buildings, clearance of debris, and subsequent construction on such parcels will not be permitted until they have been vacated. However, such demolition, clearance, and construction in parcels other than those listed will be permitted. The properties listed below shall not be entered until authorized in writing.

Parcel No.	*Owner*	*Location*	*Estimated Date of Vacancy*

2. Right-of-Entry

The right-of-entry to the following properties is anticipated as set out below. The properties listed below shall not be entered until authorized in writing.

Parcel No.	*Owner*	*Location*	*Estimated Date Right-of-Entry*

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

~~***(c) Encroachments***~~
~~*There is no involvement of encroachments for the contract.*~~

~~***(c) Encroachments***~~
~~*All known encroachments within the project limits have been removed or have been cleared to remain.*~~

~~***(c) Encroachments***~~
~~*All known encroachments within the project limits have been removed or have been cleared to remain, except as follows:*~~

~~*Encroachment*~~	~~*Owner*~~	~~*Location*~~	~~*Estimated Clear Date*~~

Utility In Conflict, Relocation Timeline - The facilities of {Utility Company} exist within the project limits and are expected to be affected by the project. The utility has {Existing Facility Type} located {Brief General Existing Facility Location}. The existing facility will be {Plan for Existing Facilities - ie removed or retired}. The utility is proposing {Proposed Facility Type} located {Brief General Proposed Facility Location}. See their work plan provided with the contract letting documents for additional details. Following {Party Utility is Dependent On} {What Shall be Done Before Utility Begins} in the location of {Location within Project} such that the utility may adjust its facilities, {Party Responsible for Communicating - Contractor, Engineer, or Utility Coordinator} shall notify the utility that the utility can begin. It is anticipated that the utility will take approximately {Total Calendar Construction Days Including Ordering Material, Scheduling, and Construction} calendar days to complete its work plan. {Additional information, details, or requirements regarding utility if applicable} If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date Work Plan was Approved}.

Utility in Conflict, Utility Received NTP - The facilities of {Utility Company} exist within the project limits and are expected to be affected by the project. The utility has {Brief General Existing Facility Type} located {Existing Facility Location}. The existing facility will be {Plan for Existing Facilities - ie removed or retired}. The utility is proposing {Proposed Facility Type} located {Brief General Proposed Facility Location}. See their work plan provided with the contract letting documents for additional detail. The utility was given Notice to Proceed on {Notice to Proceed Date}. It is anticipated that the utility will take approximately {Total Calendar Construction Days Including Ordering Material, Scheduling, and Construction} calendar days to complete its work plan. {Additional information, details, or requirements regarding utility if applicable} If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date Work Plan was Approved}.

Utility in Conflict, Work in Contract - The facilities of {Utility Company} exist within the project limits and are expected to be affected by the project. The utility has {Existing Facility Type} located {Brief General Existing Facility Location}. The Contractor shall complete this relocation as shown in the contract documents. {Additional information, details, or requirements regarding utility if applicable} If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date Work Plan was Approved}.

Utility Relocation Complete - The facilities of {Utility Company} exist within the project limits. Their facilities have been adjusted to accommodate construction. The utility now has {Active Facility Type} located {Brief General Active Facility Location}. Their previous facilities consisting of {Previous Facility Type} located {Brief General Previous Facility Location} were {What was Done with Existing Facilities - ie removed or retired}. See their work plan provided with the contract letting documents for additional detail. {Additional information, details, or requirements regarding utility if applicable} If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or {Email Address}. The work plan was approved on {Date Work Plan was Approved}.

Utility not in Conflict - The facilities of {Utility Company} exist within the project limits but are not expected to be affected by the proposed construction. The utility has {Facility Type} located {Brief General Facility Location}. See their work plan provided with the contract letting documents for additional detail. {Additional information, details, or requirements regarding utility if applicable} If questions arise, {Utility Contact} of the utility may be contacted at {Phone Number} or at {Email Address}. The work plan was approved on {Date Work Plan was Approved}.

[**NOTE TO THE UTILITY COORDINATOR**—REVIEW CONTRACT LETTING DOCUMENTS RELATED TO UTILITY COORDINATION. INCLUDE ANY NOTEWORTHY UTILITY COORDINATION CONDITIONS DEEMED NEEDED BY THE UTILITY COORDINATOR AND ANY ADDITIONAL REAL ESTATE INFORMATION AS DIRECTED BY THE PROJECT TEAM. EXAMPLES ARE INFORMATION THAT SHALL BE DISCLOSED BECAUSE THEY CAN IMPACT THE CONTRACTOR'S ABILITY TO PERFORM WORK UNDER THIS CONTRACT. EXAMPLES BELOW. INCLUDE COMPLETED VERSIONS OF THESE OR OTHERS AS APPLICABLE AND REQUIRED. REMOVE THE UNAPPLICABLE SECTION (b) AND THIS NOTE TO THE UTILITY COORDINATOR PRIOR TO SUBMITTING.]

(~~d~~b) Other Noteworthy Conditions

There are no other noteworthy conditions which may affect the progress and completion of the contract.

(~~d~~b) Other Noteworthy Conditions

The following conditions exist~~s~~ which may affect the ~~prosecution and~~ progress and completion of the contract.

{Add Noteworthy Conditions as applicable. Common Examples:}

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

{Clearing of right of way for utilities outside of the construction limits, and within public right of way, shall be performed by the Contractor and shall be included in the cost of other items.}

{The Utility Coordinator for the project is {FILL IN} who can be reached at {FILL IN}.}

{If INDOT-owned lines exist within the project area, the Utility Coordinator may, if desired, complete an in conflict work in contract or not in conflict template paragraph similar to above and insert here.} If done so, also recommend a statement that INDOT facilities are not marked by 811 and the Contractor shall use the Buried Facilities Application in INDOT's ITAP to have them marked.

[**NOTE TO THE UTILITY COORDINATOR** – CREATE SIMILAR PARAGRAPHS (a) AND (b) TO THE ABOVE FOR ALL OTHER DES NUMBERS ON THE CONTRACT. REMOVE THIS NOTE TO THE UTILITY COORDINATOR PRIOR TO SUBMITTING. THEN A SINGLE (c) AND (d) ARE INCLUDED AT THE BOTTOM.]

Des {Number} – {Roadway Name and Location}

(c) Right-of-Way

Included with the contract letting documents is a letter, outlining the Department's certification of right-of-way.

If the Department reports a Certification with Exceptions, for those parcels of real property referenced on the certification letter, the Contractor shall not enter the property unless and until 1) the Contractor has received an updated certification letter certifying that the parcel is clear for construction, and 2) the Department has authorized the Contractor to enter the property to begin construction. The Contractor shall not commence construction without receipt of the updated certification letter, even if the Contractor was otherwise authorized to proceed. ~~The project construction engineer will provide an updated certification letter to the Contractor as updates are available. The Contractor shall also ask the construction engineer for updates and provide concerns as needed.~~The contract letting documents may be updated during and after the advertisement period without notice as additional parcels become clear. Certification letters updated after the letting will also be provided to the Contractor by the Engineer.

For a Certification, no additional R/W needed, letter or Certification Clear letter, all right-of-way requirements for the contract have been cleared, and except as described below, construction can begin on the right-of-way.

1. Encroachments

The Contractor shall review plans to determine if any encroachments or other items have been marked "do not disturb" or "DND". If there is a "do not disturb" or "DND", efforts shall be taken to ensure those encroachment items are not negatively impacted by construction.

REVISION TO RECURRING SPECIAL PROVISION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

(ed) Preconstruction Conference Notification

The Contractor shall provide notification during the preconstruction conference about known corrections to or omissions of the information presented in 107.26(a) through 107.26(d) above. Otherwise, notification shall be provided as required in accordance with 105.06. ~~Notifications regarding such corrections or omissions shall not alleviate the Contractor's inquiry or interpretation obligations as contained in 105 IAC 11-3-7.~~

COMMENTS AND ACTION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

DISCUSSION:

This item was introduced and presented by Mr. Novak, assisted by Mr. Plant, who stated that the existing RSP 107-R-169 template provides little detail regarding utilities in the project area and utility relocations. Therefore, this information is often left out or added in non-standard format causing complications and confusion in construction.

There are also sections of the RSP 107-R-169 for right-of-way and encroachments. The submitter of the RSP is typically the utility coordinator who knows little about right-of-way or encroachments on the project. Therefore, this section is often left blank, excluded entirely, or includes inaccurate information, leaving contracts responsible to update the information following submission.

Mr. Novak proposed to update the utility section of the RSP to provide more information regarding each utility and more scenarios of relocations and schedules.

The location for detail of right-of-way and encroachments within the RSP was removed and replaced with stock language requiring the contractor to reference the right-of-way certification for information regarding right-of-way and rights of entry. The right-of-way certification will be uploaded as an additional contract document for bidders. Encroachments will be excluded from the RSP as the RSP is typically inaccurate regarding the encroachments. Detail will be and typically already is included on the plans and other specifications to detail what the Contractor is responsible for related to encroachments.

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

Note: A post meeting was held which resulted in highlighted change shown in these minutes (in yellow) and can be addressed while approving these minutes on next SC meeting. Also, RSP effective date has been changed to March 1, 2025 from December 1, 2024.

COMMENTS AND ACTION

107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS

[continued]

Motion: Mr. Novak Second: Mr. Koch Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** ~~X~~ Passed as Submitted TBD Passed as Revised ___ Withdrawn
2024 Standard Specifications Sections: *See* Proposal Recurring Special Provisions or Plan Details: 107-R-169 STATEMENTS ABOUT EXISTING CONDITIONS OF UTILITIES, ADDITIONAL RIGHT-OF-WAY, AND ENCROACHMENTS Standard Drawing affected: NONE Design Manual Chapter: Chapters 85 (Right-of-Way Plans Preparation) and 104 (Utility Coordination) but no revisions necessary. GIFE Section: Sections 2 (General Instructions) and 14 (Utility Relocation Inspection Procedures) but no revisions necessary.	___ 2026 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP ___ Create RSP (No.___) Effective: _X_ Revise RSP (No.107-R-169) Effective: ~~December 2024~~*March 1, 2025* ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Designers are often making errors or omitting the mandatory supplemental description of "for permanent seeding" on item 621-06545 Fertilizer. There are no other supplemental descriptions used for this item. Contract Administration is working to reduce these types of errors.

PROPOSED SOLUTION: Change the pay item description in the master Pay Item list to include "for permanent seeding." Eliminate the required supplemental description. Change the basis for payment section of the specification for the next publication of the INDOT Standard Specifications book. Update the instruction in Chapter 17 of the Indiana Design Manual.

APPLICABLE STANDARD SPECIFICATIONS: Section 621

APPLICABLE STANDARD DRAWING: none

APPLICABLE DESIGN MANUAL CHAPTER: Ch 17

APPLICABLE SECTION OF GIFE: none

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: N/A

PAY ITEMS AFFECTED: 621-06545 Fertilizer

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ad hoc group of Peter White, Kurt Pelz, Melissa Russell, and John Wooden.

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

IMPACT ANALYSIS (attach report):

Submitted By: John Wooden, PE

Title: Estimating Administrator

Division: Contract Administration

E-mail: jwooden@indot.in.gov

Date: June 13, 2024

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

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

Will this item improve safety:

- For motorists? N/A
- For construction workers? N/A

Will this proposal improve quality for:

- Construction procedures/processes? N/A
- Asset preservation? N/A
- Design process? Yes

Will this change provide the contractor more flexibility? N/A

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

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

Is this proposal needed for compliance with:

- Federal or State regulations? YNo
- AASHTO or other design code? No

Is this item editorial? Yes

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

SECTION 621 – SEEDING AND SODDING
621.14 Basis of Payment

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 621, BEGIN LINE 395, INSERT AS FOLLOWS:

Fertilizer, ~~F~~*for Permanent Seeding* ..... TON

COMMENTS AND ACTION

621.14 Basis of Payment

DISCUSSION:
Mr. Wooden introduced and presented this item stating that Designers are often making errors or omitting the mandatory supplemental description of "for permanent seeding" on item 621-06545 Fertilizer. There are no other supplemental descriptions used for this item. Contract Administration is working to reduce these types of errors.

Mr. Wooden proposed to change the pay item description in the master Pay Item list to include "for permanent seeding", to eliminate the required supplemental description. Mr. Wooden also proposed to change the basis for payment section of the specification for the next publication of the INDOT Standard Specifications book, and to update the instructions in Chapter 17 of the Indiana Design Manual.

With regard as to whether or not we need to change the pay item number, or make the current item obsolete and create a new one, Mr. Novak stated that, from previous experiences, if we change the name of an item description, it does not change the name of the description on existing contracts. So we could keep the same item code number, and just change the description. We would be able to preserve our bid history.

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

Motion: Mr. Wooden Second: Mr. Boruff Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** X Passed as Submitted ___ Passed as Revised ___ Withdrawn
2024 Standard Specifications Sections: 621.14 pg. 571. Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: Chapter 17 GIFE Section: NONE	X 2026 Standard Specifications X Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP ___ Create RSP (No.___) Effective: ___ Revise RSP (No.___) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update X Frequency Manual Update X SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: INDOT Legal has determined joint ventures, and the association of venture member liability are not adequately defined in the current Highway Contract documents.

PROPOSED SOLUTION: Define what INDOT considers a joint venture and clearly describe each venture member's liabilities and obligations to the State.

APPLICABLE STANDARD SPECIFICATIONS: Section 101

APPLICABLE STANDARD DRAWING: none

APPLICABLE DESIGN MANUAL CHAPTER: none

APPLICABLE SECTION OF GIFE: none

APPLICABLE RECURRING SPECIAL PROVISION OR PLAN DETAILS: TBD

PAY ITEMS AFFECTED: none

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ad hoc group of Kate Shelby, Steve Duncan, and John Wooden.

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: Required for all contracts.

IMPACT ANALYSIS (attach report):

Submitted By: John Wooden, PE

Title: Estimating Administrator

Division: Contract Administration

E-mail: jwooden@indot.in.gov

Date: June 13, 2024

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

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

Will this item improve safety:

- For motorists? N/A
- For construction workers? N/A

Will this proposal improve quality for:

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

Will this change provide the contractor more flexibility? N/A

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

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

Is this proposal needed for compliance with:

- Federal or State regulations? Yes
- AASHTO or other design code? No

Is this item editorial? N/A

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 101, AFTER LINE 573, INSERT AS FOLLOWS:

101.80 Joint Venture

A bid of two or three contractors will be considered a joint venture. Not more than three contractors will be allowed as parties to a joint venture. All contractors applying for joint venture approval shall be prequalified separately.

A contractor that is a member of a joint venture may not submit a proposal bid, in its individual capacity or as a participant in another joint venture, for the same contract on which the joint venture bids.

Each contractor on an awarded Joint Venture bid shall comply with 105 IAC 11-3-5 and, regardless of any other agreement between the contractors, is jointly and severally liable to the State for all obligations owing to the State under the awarded contract.

COMMENTS AND ACTION

101.80 Joint Ventures

DISCUSSION:
This item was introduced and presented by Mr. Wooden who explained that INDOT Legal has determined joint ventures, and the association of venture member liability are not adequately defined in the current Highway Contract documents.

Mr. Wooden proposed to define what INDOT considers a joint venture and clearly describe each venture member's liabilities and obligations to the State.

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

Motion: Mr. Wooden Second: Mr. Novak Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** X Passed as Submitted ___ Passed as Revised ___ Withdrawn
2024 Standard Specifications Sections: 101 begin pg. 1 -13 Recurring Special Provisions or Plan Details: (Note: Proposed new subsection number 101.80 is currently used in RSP 109-C-279 IDIQ WORK ORDERS) Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	X 2026 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP X Create RSP (No. 101-C-xxx) Effective: December 1, 2024 ___ Revise RSP (No.___) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: With the upcoming switch to AASHTOWare Project (AWP), AWP incorporates the ledge information as the material name for aggregate delivered to INDOT contracts. Some aggregate sources are not listing the ledges on the tickets even though ITM 211 requires ledge information to be provided on tickets.

PROPOSED SOLUTION: Add "edges to the list of information required to be shown on weigh tickets in 109.01(b).

APPLICABLE STANDARD SPECIFICATIONS: 109.01

APPLICABLE STANDARD DRAWINGS: None

APPLICABLE DESIGN MANUAL SECTION: None

APPLICABLE SECTION OF GIFE: None

APPLICABLE RECURRING SPECIAL PROVISIONS: None

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc: District Testing Engineers

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: N/A; if approved, inclusion in the 2026 Spec Book is sufficient

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 6/18/24

IMPACT ANALYSIS REPORT CHECKLIST

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

Does this item appear in any other specification sections? N/A
Will approval of this item affect the Approved Materials List? N/A
Will this proposal improve:

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

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

Will this item improve safety:

- For motorists? N/A
- For construction workers? N/A

Will this proposal improve quality for:

- Construction procedures/processes? Yes
- Asset preservation? N/A
- Design process? N/A

Will this change provide the contractor more flexibility? N/A

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

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

Is this proposal needed for compliance with:

- Federal or State regulations? No
- AASHTO or other design code? No

Is this item editorial? No

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

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 109, BEGIN LINE 73, INSERT AS FOLLOWS:

(b) Scales and Measurement by Weight (Mass)

All materials for which measurements are obtained by weight (mass) shall be weighed on approved scales which, except as hereinafter provided for out-of-state scales, shall be tested and sealed by the Indiana State Board of Health, Division of Weight and Measures. This inspection shall have been made within a period of not more than one year prior to the date of use for weighing material. A scale which has been tested and approved within this one year period and which has been repaired or dismantled or moved to another location, shall again be tested and approved before it is eligible for weighing. All interested parties, such as the Department, the Contractor, or the owner of the scales, may request an inspection of the scales in question. The latest inspection shall take precedence over all previous inspections.

A motor-truck scale shall have a suitable undercarriage of such construction that shall safely carry and weigh an amount equal to 80% of the rated capacity of the scale on either end of the scale platform. When so loaded, the stresses in the lever system shall not exceed the stresses allowable under AREA specifications. The load carried per 1 in. of knife-edged bearing shall not exceed 5,000 lb.

The scale platform shall be of such length and width as to conveniently accommodate all trucks containing materials which need to be weighed. The entire truck load shall rest on the scale platform and shall be weighed as one draft.

If material is weighed on truck scales, weigh tickets showing the net weight of each load of material delivered shall be supplied for use in computing quantities. The tickets shall contain the ticket serial number, date, contract number, source of supply, material designation such as *ledge and* size or type, DMF or JMF number for HMA, truck number, time weighed, gross weight direct reading if scale is of the direct reading type, tare, net weight, and moisture content if applicable. Space shall be provided on each ticket for the signature of a representative of the Engineer.

COMMENTS AND ACTION

109.01 Measurement of Quantities

DISCUSSION:
Mr. Reilman introduced and presented this item explaining that with the upcoming switch to AASHTOWare Project, AWP, AWP incorporates the ledge information as the material name for aggregate delivered to INDOT contracts. Some aggregate sources are not listing the ledges on the tickets even though ITM 211 requires ledge information to be provided on tickets.

Mr. Reilman proposed to add "ledges" to the list of information required to be shown on weigh tickets in 109.01(b).

Prior to the meeting:
Mr. Koch stated that inclusion of ledge information is another step for field personnel and industry. Have we tracked failures via ledges? Just curious if the additional cost/efforts add value and are warranted.

Mr. Buckner responded that the District Testing departments along with the M&T aggregate section moved to incorporating the ledge into the requirement early last year. AWP incorporates the ledge in the product name; therefore, Construction will need to know the ledge designation to select the material supplied for the contract. The main reason for supplying the ledge on the tickets is so HMA and Concrete plants know what ledges are being supplied to their plants. HMA/Concrete mix design submittals/acceptance hinge on what ledges the plant uses for their mix design. It will also allow INDOT to easily know if a ledge is acceptable for use in a mix design. When INDOT conducts Quality/POU/AP/AS testing on aggregates, it is labeled by the ledges represented by the sample. When those samples fail testing, INDOT would mark it in AWP as fail, therefore not an option for the HMA/Concrete plant to use in a mix design submittal. In regard to Testing, this change is worth the cost. I know some aggregate sources in Vincennes District are already working on adding this requirement to their electronic ticketing system.

Mr. Koch said that it makes sense for higher end products. Section 904 classes aggregate from AP to F. Would the AWP result note failures for specific classes? For example, an aggregate may fail for HMA/PCCP but could be D or better and be used for 303 shoulder aggregate.

Mr. Koch asked if field personnel would need to be entering the ledges specifically, even for simpler items?

Mr. Jacobs explained the process, concerning ledges, that in the past it was a rather tedious and drawn-out process, but now using AWP simplifies the process, making it less time consuming.

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

[continued on next page]

COMMENTS AND ACTION

109.01 Measurement of Quantities

[continue]

Motion: Mr. Reilman Second: Mr. Boruff Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** X Passed as Submitted ___ Passed as Revised ___ Withdrawn
2024 Standard Specifications Sections: 109.01(b) pg. 103. Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	X 2026 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP ___ Create RSP (No.___) Effective: ___ Revise RSP (No.___) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEMS(S) ENCOUNTERED:

- The obsolete subgrade treatment types (ID, IV, and IVA) were specified.
- It was determined that further details were needed for aggregate subgrade compaction and construction.
- Priming is not used in the INDOT project.
- Aggregate moisture content up to OMC is not necessary.

PROPOSED SOLUTION:

- The obsolete subgrade treatment types (ID, IV, and IVA) were deleted.
- Further details in aggregate compaction and construction were provided, including proofrolling requirements of aggregate subgrade, use of geosynthetics, spreading, and leveling devices.
- The priming section (301.08) was deleted.
- The aggregate moisture requirement for compaction was revised from "between 4% and OMC" to "between 4% and 7%".

APPLICABLE STANDARD SPECIFICATIONS: 301

APPLICABLE STANDARD DRAWINGS: NA

APPLICABLE DESIGN MANUAL SECTION: NA

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: NA

PAY ITEMS AFFECTED: No

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ICA, Subcontractors, Area Engineers, Material Engineers and Geotechnical Engineers.

IMPACT ANALYSIS (attach report): NA

Submitted by: Jim Reilman for Nayyar Siddiki
Title: State Materials Engineer
Organization: INDOT
Phone Number: 317-522 9692

Date: 6/22/2024

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: NA
Construction time: Yes
Customer satisfaction? NA
Congestion/travel time? NA
Ride quality? NA

Will this proposal reduce operational costs or maintenance effort? NA
Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal reduce operational costs or maintenance effort? NA
Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? NA
Design process? NA

Will this change provide the contractor more flexibility? NA

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

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

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:

(Note: Proposed changes shown highlighted gray.
Previously approved changes by the Standards Committee – orange and are shown in Recurring Special Provision: 207-R-781 SUBGRADE TREATMENT)

The Standard Specifications are revised as follows:

SECTION 301, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 301 – AGGREGATE BASE

301.01 Description

This work shall consist of placing coarse aggregate on a prepared grade in accordance with 105.03.

MATERIALS

301.02 Materials

Materials shall be in accordance with the following:

Coarse Aggregate, Class D or Higher 904.03
Geosynthetic Materials 918

~~ACBF shall not be used for subgrade treatment Type ID, Type IV, and Type IVA.~~

CONSTRUCTION REQUIREMENTS

301.03 Preparation of Subgrade

Subgrade shall be prepared *and proofrolled* in accordance with 207.04. *When shown on the plans, geosynthetics shall be placed over the prepared subgrade in accordance with 214.03 or as directed.* Proofrolling will not be required in trench sections and other areas where proofrolling equipment cannot be used.

301.04 Temperature Limitations

Aggregate shall not be placed when the air temperature is less than 35 °F. ~~Aggregate shall not be placed on a frozen subgrade.~~ Frozen aggregate shall not be placed. *Aggregate shall not be placed on frozen subgrade, subbase, or aggregate base.*

301.05 Spreading

~~The moisture content of the aggregate shall be between 4% and the optimum moisture content when the aggregate is delivered to the project.~~ *The aggregate shall be placed with a moisture content between 4 and 7%. The Contractor shall add water or dry the stockpile as necessary to meet this moisture requirement. The aggregate will be tested for density or stiffness testing in accordance with 203.24.* Unless otherwise directed *by the Engineer*, water shall not be added to the aggregate on the grade. *All test results shall be maintained during the duration of the contract and made available to the Engineer upon request.*

~~Aggregate shall be spread in uniform lifts with a spreading and leveling device~~

~~approved by the Engineer. The spreading and leveling device shall be capable of placing aggregate to the depth, width, and slope specified. The compacted depth of each lift shall be a minimum of 3 in. and a maximum of 6 in.~~

~~Aggregate shall be handled and transported to minimize segregation and the loss of moisture. In areas inaccessible to mechanical equipment, each lift shall be 3 in. and an approved hand spreading method may be used.~~

Aggregate shall be transported, handled, and compacted to minimize segregation and the loss of moisture. Aggregate shall be spread in uniform lifts with a spreading and leveling device approved by the Engineer.

The spreading and leveling device shall be capable of placing aggregate to the depth, width, and slope specified. The material shall be placed with self-propelled spreading equipment, such as a spreader box or paver, capable of placing the material true to line and grade. The material shall be spread such that it minimizes segregation and requires minimal blading or manipulation. The compacted depth of each lift shall be a maximum of 6 in. The Contractor may use hand-placing methods when the total area of the material is 2,000 sq yds or less, or in small areas where machine spreading is impractical.

The Contractor may use hand-placing methods, dozers, or graders in small areas, areas of subgrade construction, or where self-propelled spreading equipment is impractical. Small areas include lane widths less than 12 ft or lengths less than 1,000 ft. In small areas, or areas inaccessible to self-propelled spreading equipment, each lift shall be a maximum of 4 in.

The material shall be placed in two or more approximately equal lifts when the specified compacted thickness exceeds the maximum allowed.

301.06 Compacting

Each lift shall be compacted immediately after spreading. Dense graded aggregate shall be compacted to achieve the allowable average deflection as determined with LWD testing in accordance with 203.24(b).

The allowable average deflection *and the maximum deflection* for aggregate over the chemically modified soils, ~~and~~ untreated soils*, and cement stabilized subgrade soils* shall be in accordance with the Tables shown in 203.24(b) *and 219.12, respectively*.

As an alternate *to LWD*, aggregates shall be compacted to a minimum of 100% of the maximum dry densities in accordance with AASHTO T 99. In situ density will be determined in accordance with 203.24(b). Aggregate shall meet the compaction requirements at the time subsequent courses are placed. *Stiffness and density methods will not be used in the same project.*

~~Coarse graded aggregates shall be compacted in accordance with 203.25.~~

In areas inaccessible to compaction equipment, such as private drives and mailbox approaches, the compaction requirements may be accepted by visual inspection.

All displacement or rutting of the aggregate shall be repaired prior to placing subsequent material.

301.07 Checking and Correcting Base

The top of each aggregate course shall be checked transversely to the cross section and all deviations in excess of 1/2 in. shall be corrected. If additional aggregate is required, the course shall be remixed and re-compacted.

~~**301.08 Priming**~~

~~A prime coat, when required, shall be in accordance with 405.~~

301.~~09~~*08* Method of Measurement

Compacted aggregate base will be measured by the cubic yard based on the theoretical volume to the neat line as shown on the plans. ~~Geotextiles~~*Geosynthetics* will be measured in accordance with ~~616.12~~*214.05*.

301.~~10~~*09* Basis of Payment

The accepted quantities of compacted aggregate base will be paid for at the contract unit price per cubic yard, complete in place. ~~Geotextiles~~*Geosynthetics* will be paid for in accordance with ~~616.13~~*214.06*.

Payment will be made under:

Pay Item	Pay Unit Symbol
Compacted Aggregate, No. 2	CYS
Compacted Aggregate, No. 5	CYS
Compacted Aggregate, No. 8	CYS
Compacted Aggregate, No. 53	CYS

The cost of placing, *spreading,* compacting, water, aggregate placed outside neat lines as shown on the plans, and necessary incidentals shall be included in the cost of the pay item.

Payment will not be made for material placed outside of a 1:1 slope from the planned typical section.

Replacement of pavement damaged by the Contractor's operations shall be at no additional payment.

COMMENTS AND ACTION

SECTION 301 – AGGREGATE BASE

DISCUSSION:
Mr. Reilman introduced this item saying that this and the next one we're both developed with INDOT Geotechnical Group and OHH review optimization committees.

Also, he said, that when this agenda went out, they received several comments from others who were not involved with these subcommittees. and so at this time, he was recommended to withdraw the item and to make sure all the comments are fully addressed.

Mr. Reilman withdrew this item pending further review.

Motion: Mr. Reilman Second: Mr. Ayes: Nays: FHWA Approval:	**Action:** ___ Passed as Submitted ___ Passed as Revised _X_ Withdrawn
2024 Standard Specifications Sections: 301 pg. 263 through pg. 265. Recurring Special Provisions or Plan Details: 207-R-781 SUBGRADE TREATMENT 214-R-784 GEOSYNTHETICS (to change references in 2026 SS: 301.09 and 301.10) Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	___ 2026 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP ___ Create RSP (No.___) Effective: ___ Revise RSP (No.___) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEMS(S) ENCOUNTERED:

- Recycled Concrete Aggregate No. 53 may be used in aggregate pavement and shoulder.
- It was determined that further details were needed for aggregate pavement and shoulder compaction and construction.

PROPOSED SOLUTION:

- Statement allowing Recycled Concrete Aggregate No. 53 was added.
- Further details in aggregate compaction and construction were provided, including proofrolling, LWD deflection requirements, and compaction equipment in the inaccessible areas.

APPLICABLE STANDARD SPECIFICATIONS: 303

APPLICABLE STANDARD DRAWINGS: NA

APPLICABLE DESIGN MANUAL SECTION: NA

APPLICABLE SECTION OF GIFE: NA

APPLICABLE RECURRING SPECIAL PROVISIONS: NA

PAY ITEMS AFFECTED: No

APPLICABLE SUB-COMMITTEE ENDORSEMENT: ICA, Subcontractors, Area Engineers, Material Engineers and Geotechnical Engineers.

IMPACT ANALYSIS (attach report): NA

Submitted by: Jim Reilman for Nayyar Siddiki

Title: State Materials Engineer

Organization: INDOT

Phone Number: 317-522 9692

Date: 6/22/2024

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: NA
Construction time: Yes
Customer satisfaction? NA
Congestion/travel time? NA
Ride quality? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal reduce operational costs or maintenance effort? NA

Will this item improve safety:

For motorists? NA
For construction workers? NA

Will this proposal improve quality for:

Construction procedures/processes? Yes
Asset preservation? NA
Design process? NA

Will this change provide the contractor more flexibility? NA

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

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

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:

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 303, BEGIN LINE 1, DELETE AND INSERT AS FOLLOWS:

SECTION 303 – AGGREGATE PAVEMENTS OR SHOULDERS

303.01 Description

This work shall consist of placing a dense-graded compacted aggregate on prepared subgrade in accordance with 105.03.

MATERIALS

303.02 Materials

Materials shall be in accordance with the following:

Coarse Aggregate, Class D or Higher, Size No. 53* 904
Coarse Aggregate, Class D or Higher, Size No. 73** 904

* *Recycled Concrete Aggregate No. 53 may be used when specified.*
** Surface courses only, when specified.

CONSTRUCTION REQUIREMENTS

303.03 Preparation of Subgrade

Subgrade shall be prepared in accordance with 207.04. *Proofrolling shall be performed in accordance 203.26.* Proofrolling will not be required in trench sections and other areas where proofrolling equipment cannot be used.

303.04 Temperature Limitations

Aggregate shall not be placed when the air temperature is less than 35°F. Aggregate shall not be placed on a frozen subgrade. Frozen aggregate shall not be placed.

303.05 Spreading

Aggregate shall be spread in uniform lifts with a spreading and leveling device approved by the Engineer. The spreading and leveling device shall be capable of placing aggregate to the depth, width, and slope specified. The compacted depth of each lift shall be a minimum of 3 in. and a maximum of 6 in., except where utilized as a shoulder. The compacted depth of a lift for a shoulder shall be a minimum of 3 in. and a maximum of 9 in.

Aggregate shall be handled and transported to minimize segregation and the loss of moisture. In areas inaccessible to mechanical equipment, approved hand spreading methods may be used.

The moisture content of the aggregate shall be between 4% and the optimum moisture content when the aggregate is delivered to the project. Water shall not be added

to the aggregate on the grade.

303.06 Compacting

Compaction shall be in accordance with 301.06.

The allowable average deflection and the maximum deflection for the aggregate over the chemically modified soils and untreated soils, shall be in accordance with the Tables shown in 203.24(b). All displacement or rutting of the compacted aggregate shall be repaired prior to placing subsequent material.

In the areas inaccessible to compaction equipment, such as private drives, compaction requirements may be accepted by visual inspection.

303.07 Checking and Correcting Base and Surface

The top of each aggregate course shall be checked transversely and all deviations in excess of 1/2 in. shall be corrected. If additional aggregate is required, the course shall be remixed and re-compacted.

303.08 Dust Palliative

A dust palliative, if required, shall be in accordance with 407.

303.09 Method of Measurement

Compacted aggregate will be measured by the ton in accordance with 109.01(b) for the type specified.

303.10 Basis of Payment

The accepted quantities of compacted aggregate will be paid for at the contract unit price per ton, for the type specified, complete in place.

Payment will be made under:

Pay Item	**Pay Unit Symbol**
Compacted Aggregate, No. 53	TON
Compacted Aggregate, No. 73	TON

The cost of placing, compacting, water, and necessary incidentals shall be included in the costs of the compacted aggregate.

Payment will not be made for material placed outside of a 1:1 slope from the planned typical section.

Replacement or repair of pavement or shoulders damaged by the Contractor's operations shall be at no additional payment.

COMMENTS AND ACTION

SECTION 303 – AGGREGATE PAVEMENTS OR SHOULDERS

DISCUSSION:
Mr. Reilman withdrew this item pending further review.

Motion: Mr. Reilman Second: Mr. Ayes: Nays: FHWA Approval:	Action: __ Passed as Submitted __ Passed as Revised _X_ Withdrawn
2024 Standard Specifications Sections: 303 pg. 267 through pg. 269. Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	__ 2026 Standard Specifications __ Revise Pay Items List __ Notification to Designers if change is not addressed by RSP __ Create RSP (No.) Effective: __ Revise RSP (No.__) Effective: __ Standard Drawing Effective: __ Create RPD (No. __) Effective: __ GIFE Update __ Frequency Manual Update __ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: Repetitive or superfluous language in the Detectable Warning Surface materials section

PROPOSED SOLUTION: Delete the superfluous language shown.

APPLICABLE STANDARD SPECIFICATIONS: 905.05

APPLICABLE STANDARD DRAWINGS: None

APPLICABLE DESIGN MANUAL SECTION: None

APPLICABLE SECTION OF GIFE: None

APPLICABLE RECURRING SPECIAL PROVISIONS: None

PAY ITEMS AFFECTED: None

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc: David Jacobs, Jim Reilman

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: N/A; include in the 2026 spec book

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 6/18/24

IMPACT ANALYSIS REPORT CHECKLIST

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

Does this item appear in any other specification sections? No
Will approval of this item affect the Approved Materials List? No
Will this proposal improve:

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

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

Will this item improve safety:

- For motorists? N/A
- For construction workers? N/A

Will this proposal improve quality for:

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

Will this change provide the contractor more flexibility? N/A

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

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

Is this proposal needed for compliance with:

- Federal or State regulations? No
- AASHTO or other design code? No

Is this item editorial? Yes

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

(Note: Proposed changes shown highlighted gray)

The Standard Specifications are revised as follows:

SECTION 905, BEGIN LINE 35, DELETE AS FOLLOWS:

905.05 Detectable Warning Surfaces

The detectable warning surface in concrete curb ramps shall be constructed using materials from the QPL of Detectable Warning Surfaces, which is maintained by the Department's Division of Materials and Tests. A surface manufacturer wishing to add a product to the QPL shall comply with Procedure L of ITM 806.

(a) Brick detectable warning surfaces shall consist of clay, shale, or similarly naturally occurring earthy substance, subjected to heat treatment at elevated temperatures ~~to form bricks or pavers~~. The dimensions of the brick shall be 8 in. in length, 4 in. in width including any spacing lugs. The thickness of the brick shall be 2 in., excluding dome height and edge chamfers. The truncated domes on the surface shall be formed integral with the main body of the detectable warning surface and be present on the brick prior to heat treatment. The size and physical requirements of the bricks shall be in accordance with ASTM C902 for weather and traffic environment classifications Class SX, Type II, respectively. The truncated domes may be ground off to meet the cap thickness requirement for compressive strength testing.

(b) Brick detectable warning surfaces shall be predominantly red-brown in color and shall be uniform throughout the brick. The color will be determined from the average of five color readings for detectable warning surfaces when measured at the top surface between the raised truncated domes and determined in accordance with ASTM E1349, CIE Illuminant D65, 10° Standard Observer, using instrument geometry of 45°/0°, and the CIE L* a* b* color system. The tested bricks shall be within the limits as follows:

	Minimum	Maximum
L*	35.0	50.0
a*	6.0	36.0
b*	0.0	30.0

The value of a* shall not be less than 90% of the value of b*. The color difference of any installed brick after one year of exposure or of an individual detectable warning surface from the average color for any product or model from a manufacturer shall not be greater than 5.0 ΔE* units. ~~The color shall be uniform throughout the detectable warning surfaces.~~

(c) Cast iron detectable warning surfaces shall be manufactured from gray iron in accordance with AASHTO M 105, Class No. 30A as a minimum. The truncated domes shall be as shown on the plans. The tops of the domes and the space between domes shall have a non-slip textured surface. The minimum thickness of the casting shall be 0.20 in. The minimum thickness shall not be measured within the area of integral reinforcing ribs or bracing, domes, or the textured surface.

(d) The height range of the truncated domes shall be between 0.18 in. and 0.26 in. The design values shall be within the ranges identified in the Standard Drawings. No more than two truncated domes per surface may be out of tolerance for dimensions.

(e) Detectable warning surfaces that are not classified as brick in accordance with 905.05(a) or cast iron in accordance with 905.05(c) will be considered. The detectable warning surfaces shall meet the color requirements of 905.05(b) and the truncated dome requirements of 905.05(d).

COMMENTS AND ACTION

905.05 Detectable Warning Surfaces

DISCUSSION:
Mr. Reilman has revealed that a pre-meeting discussion took place and felt that the wording in specification should remain unchanged.

Mr. Reilman withdrew this item deeming that the proposed changes were unnecessary.

Motion: Mr. Reilman Second: Mr. Ayes: Nays: FHWA Approval:	**Action:** ___ Passed as Submitted ___ Passed as Revised _X_ Withdrawn
2024 Standard Specifications Sections: 905.05 pg. 1016 – 1018 Recurring Special Provisions or Plan Details: NONE Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	___ 2026 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP ___ Create RSP (No.___) Effective: ___ Revise RSP (No.___) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: A previous revision to 203.18 in October 2023 clarified the use of recycled concrete pavement by requiring it to be processed into coarse aggregate-sized material. INDOT Geotechnical Engineering desired additional clarification for use of recycled concrete in embankment.

PROPOSED SOLUTION: Clarify where and what size the recycled concrete pavement must be for use in embankments.

APPLICABLE STANDARD SPECIFICATIONS: none

APPLICABLE STANDARD DRAWINGS: none

APPLICABLE DESIGN MANUAL SECTION: none

APPLICABLE SECTION OF GIFE: none

APPLICABLE RECURRING SPECIAL PROVISIONS: RSP 203-R-786

PAY ITEMS AFFECTED: none

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc: Nayyar Siddiki, Sean Yoon

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: same as existing RSP 203-R-786

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 7/3/24

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? N/A
Will this proposal improve:

Construction costs? Yes

Construction time? Yes

Customer satisfaction? N/A

Congestion/travel time? N/A

Ride quality? N/A

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

Will this item improve safety:

For motorists? N/A

For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? N/A

Asset preservation? N/A

Design process? N/A

Will this change provide the contractor more flexibility? Yes

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

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

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

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

(Note: previously approved changes shown highlighted gray and are in RSP 203-R-786.
Basis for Use: Required for all contracts with any **203** pay items.
Newly proposed with additional received prior this meeting changes shown highlighted yellow.)

The Standard Specifications are revised as follows:

SECTION 203, BEGIN LINE 761, DELETE AND INSERT AS FOLLOWS:

203.18 Embankment Construction

Embankment construction shall consist of constructing roadway embankments, including preparation of the areas upon which they are to be placed; the construction of dikes within or outside the right-of-way; the placing and compacting of approved material within roadway areas where unsuitable material has been removed; and the placing and compacting of embankment material in holes, pits, and other depressions within the roadway area. Only approved materials shall be used in the construction of embankment backfill. Recycled concrete pavement *processed into coarse aggregate* shall be from past documented Department projects. RAP shall be the product resulting from the cold milling or crushing of an existing HMA pavement. Rocks, broken concrete, RAP, or other solid materials shall not be placed in embankment areas where piling ~~is~~*and other foundations are* to be placed or driven.

Recycled concrete pavement ~~*processed into coarse aggregate* shall meet the gradation requirements of B borrow in accordance with 904.06. Construction requirements shall be in accordance with 203.20(a) or 211.03~~*measuring 12 in. or less in all directions may be incorporated into the embankment. Reinforcement shall not protrude from the recycled concrete pavement aggregate. Construction of embankment shall be in accordance with 203.20(a). Each layer shall be choked thoroughly with broken concrete aggregates and be compacted to the required stiffness or as directed. The final ~~2 ft~~30 in. of the embankment just below the subgrade shall be composed of material meeting the gradation requirements of coarse aggregate in accordance with 904.01, or B borrow in accordance with 904.06. Construction requirements shall be in accordance with 211.03.*

Only RAP particles measuring 2 in. or less in all directions shall be incorporated into the top ~~52 ft~~*30 in.* of the embankment *just below the bottom of the subgrade*. RAP particles incorporated anywhere in the embankment shall be 5 in. or less. *RAP shall be constructed in accordance with 203.24.*

When two sizes are used for one embankment, materials shall be separated with a layer of geotextile in accordance with 918.02(c), Type 2A. Geotextile used between recycled material lifts shall be included in the cost of the embankment pay item.

Recycled concrete pavement *processed into coarse aggregate* and RAP shall not be mixed together or with other materials. When two or more approved materials are allowed for one embankment, materials shall be separated with a layer of geotextile in accordance with 918.02(c), Type 2A. Geotextile used between recycled material lifts shall be included in the cost of the embankment pay item.

Recycled concrete pavement *processed into coarse aggregate* or RAP shall only be used below the elevation of the pavement underdrains. Compacted lift thickness for RAP shall not be greater than 6 in. within the top ~~5~~ ~~2 ft~~*30 in.* of the embankment. Where the depth of the embankment exceeds 5 ft, the compacted lift thickness for RAP shall not be greater than 12 in. Recycled concrete pavement ~~*processed into coarse aggregate*~~ and RAP shall not be used within 2 ft of the water table.

~~Recycled concrete pavement *processed into coarse aggregate* shall be constructed in accordance with 203.20. RAP shall be constructed in accordance with 203.23 or 203.24.~~ Proofrolling in accordance with 203.26 shall be performed to cover the entire grade ~~for every~~ *at a maximum thickness of* 5 ft of ~~fill~~*recycled concrete or RAP*.

A geotextile in accordance with 918.02(c), Type 2B shall be placed in accordance with 214 prior to the placement of subgrade treatment Type IC~~,~~ *or* Type II~~, or Type IV~~ in accordance with 207 when recycled concrete pavement *processed into coarse aggregate* or RAP is used for embankment construction. Recycled concrete pavement *processed into coarse aggregate* or RAP shall not be used for embankment construction when subgrade Type I, Type IBC, or Type IBL is specified. Geotextile shall be placed completely covering the top of the embankment. A minimum 24 in. soil encasement shall be constructed concurrently with the recycled concrete pavement *processed into coarse aggregate* or RAP lift. The soil encasement shall be suitable for vegetation growth and shall be constructed in accordance with 203.09.

COMMENTS AND ACTION

203.18 Embankment Construction

DISCUSSION:
Mr. Reilman proposed to clarify where and what size the recycled concrete pavement shall be for use in embankments.

Based on comments and input received prior to this meeting, additional proposed language is shown in these minutes.

In addition, Mr. Reilman stated that Mr. Siddiki with our geotechnical engineering group stopped by this morning and had mentioned that even though they caught up with received comments, still would like to withdraw this item and bring it back at the later day.

Mr. Reilman withdrew this item pending further review.

Motion: Mr. Reilman Second: Mr. Ayes: Nays: FHWA Approval:	**Action:** ___ Passed as Submitted ___ Passed as Revised _X_ Withdrawn
2024 Standard Specifications Sections: 203.18 pg. 168-169 Recurring Special Provisions or Plan Details: 203-R-786 Excavation and Embankment Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	___ 2026 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP ___ Create RSP (No.) Effective: ___ Revise RSP (No.) Effective: ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update ___ Frequency Manual Update ___ SiteManager Update

PROPOSAL TO STANDARDS COMMITTEE

PROBLEM(S) ENCOUNTERED: This RSP was created from an item at the November 2023 Standards Committee Meeting. Unfortunately the QPL mentioned in the new 908.01 section was not created. Recently, when creating the QPL for Metal Pipe Sources, some errors were noted in the November 2023 proposal, such as not all metal pipes are covered by the AASHTO Product Evaluation and Audit Solutions CMP program.

PROPOSED SOLUTION: Correct the erroneous entries requiring certain pipes to have an AASHTO evaluation when that particular pipe material is not in the AASHTO program.

APPLICABLE STANDARD SPECIFICATIONS: none

APPLICABLE STANDARD DRAWINGS: none

APPLICABLE DESIGN MANUAL SECTION: none

APPLICABLE SECTION OF GIFE: none

APPLICABLE RECURRING SPECIAL PROVISIONS: RSP 715-R-764

PAY ITEMS AFFECTED: none

APPLICABLE SUB-COMMITTEE ENDORSEMENT: Ad hoc: District Testing Engineers

IF APPROVED AS RECURRING SPECIAL PROVISION OR PLAN DETAILS, PROPOSED BASIS FOR USE: same as existing BFU for 715-R-764

IMPACT ANALYSIS (attach report):

Submitted By: Jim Reilman

Title: State Materials Engineer

Organization: INDOT

Phone Number: (317) 522-9692

Date: 7/3/24

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? 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? N/A

Will this item improve safety:

For motorists? N/A

For construction workers? N/A

Will this proposal improve quality for:

Construction procedures/processes? N/A

Asset preservation? N/A

Design process? N/A

Will this change provide the contractor more flexibility? N/A

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

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

Is this proposal needed for compliance with:

Federal or State regulations? No

AASHTO or other design code? No

Is this item editorial? No

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

REVISION TO 2024 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
SECTION 908 – METAL PIPE
908.01 ~~Blank~~*Metal Pipe Requirements*

(Note: previously approved changes shown highlighted gray and are in RSP 715-R-764 PIPE CULVERTS, AND STORM AND SANITARY SEWERS.
Basis for Use: Required for all contracts with any **715** or **717** pay items.
Newly proposed changes shown highlighted yellow.)

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~~[B]
Corrugated Polyethylene Pipe, Type S..... *[A]
Corrugated Polypropylene Pipe ..... *[A]
Corrugated Steel Pipe and Pipe-Arches ..... ~~908.02~~ [B]
Non-Reinforced Concrete Pipe, Class 3..... 907.01
Polymer Precoated Galvanized Corrugated Steel
Pipe and Pipe-Arches ..... ~~908.08~~ [B]
Profile Wall Polyethylene Pipe, Closed ..... *[A]
Profile Wall Polyethylene Pipe, Ribbed..... *[A]
Profile Wall PVC Pipe ..... *[A]
Reinforced Concrete Horizontal Elliptical Pipe 907.03
Reinforced Concrete Pipe..... 907.02
Smooth Wall Polyethylene Pipe ..... *[A]
Smooth Wall PVC Pipe..... *[A]
Spiral Rib Steel Pipe ..... ~~908.02~~ [B]
Structural Plate Pipe and Pipe-Arches..... ~~908.09~~ [B]*908.09*

*[A] All thermoplastic pipes shall be from the QPL of Thermoplastic Pipe and Liner Pipe Sources in accordance with 907.16.

[B] *~~All m~~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..... *[A]
Corrugated Polypropylene Pipe ..... *[A]
Fully Bituminous Coated and Lined Corrugated Steel
Pipe and Pipe-Arches ..... ~~908.07~~ [B]
Non-Reinforced Concrete Pipe, Class 3..... 907.01

Polymer Precoated Galvanized Corrugated Steel
Pipe and Pipe-Arches Type IA and Type IIA..... ~~908.08~~ [B]
Profile Wall Polyethylene Pipe, Closed ..... *[A]
Profile Wall Polyethylene Pipe, Ribbed..... *[A]
Profile Wall PVC Pipe ..... *[A]
Reinforced Concrete Horizontal Elliptical Pipe 907.03
Reinforced Concrete Pipe..... 907.02
Smooth Wall Polyethylene Pipe ..... *[A]
Smooth Wall PVC Pipe..... *[A]

*[A] All thermoplastic pipes shall be from the QPL of Thermoplastic Pipe and Liner Pipe Sources in accordance with 907.16.

[B] ~~*All m*~~*Metal pipes shall be from the QPL of Metal Pipe Sources in accordance with 908.01.*

SECTION 715, BEGIN LINE 91, DELETE AND INSERT AS FOLLOWS:

(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 ..... *[A]
Corrugated Polyethylene Pipe, Type S**..... *[A]
Corrugated Polyethylene Pipe, Type SP ..... *[A]
Drain Tile**..... 907.10
Non-Reinforced Concrete Pipe..... 907.01
Perforated Clay Pipe**..... 907.09
Perforated PVC Semicircular Pipe..... *[A]
Profile Wall PVC Pipe ..... *[A]

*[A] 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~~ [B]
Corrugated Polyethylene Pipe, Type S..... *[A]
Corrugated Polypropylene Pipe ..... *[A]
Corrugated Steel Pipe and Pipe-Arches ..... ~~908.02~~ [B]
Fully Bituminous Coated and Lined Corrugated
Steel Pipe and Pipe-Arches..... ~~908.07~~ [B]
Polymer Precoated Galvanized Corrugated Steel

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
SECTION 908 – METAL PIPE
908.01 ~~Blank~~*Metal Pipe Requirements*

Pipe and Pipe-Arches ..... ~~908.08~~ [B]
Profile Wall Polyethylene Pipe, Closed ..... *[A]
Profile Wall Polyethylene Pipe, Ribbed..... *[A]
Profile Wall PVC Pipe ..... *[A]
Smooth Wall Polyethylene Pipe ..... *[A]
Smooth Wall PVC Pipe..... *[A]
Spiral Rib Steel Pipe ..... ~~908.02~~ [B]

~~*~~[A] All thermoplastic pipes shall be from the QPL of Thermoplastic Pipe and Liner Pipe Sources in accordance with 907.16.

[B] ~~*All m*~~*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 ~~t~~*T*hermoplastic ~~p~~*P*ipe and ~~l~~*L*iner ~~p~~*P*ipe *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
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

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
SECTION 908 – METAL PIPE
908.01 ~~Blank~~*Metal Pipe Requirements*

~~Schedule 40~~ PVC *Plastic* Pipe*, Schedule 40*	907.24(b)		D1785 ~~or D2665~~	916, Type C Certification
Slotted Vane Drain Pipe	*908.14*	*M 278*	*F679*	*ITM 806, Procedure A*
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 for the identified pipe materials specified in the table below 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~~, or~~ 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*
Required to be furnished from a manufacturer on the QPL include:				
~~*Cast Iron Soil Pipe*~~	~~*908.10*~~		~~*A74*~~	~~*Buy America Certification*~~
Corrugated Aluminum Alloy Pipe and Pipe-Arches	*908.04*	*M 196*		*ITM 806, Procedure O*
Corrugated Steel Pipe and Pipe-Arches	*908.02*	*M 36*		*ITM 806, Procedure O*
Fully Bituminous Coated Corrugated and Lined Steel Pipe and Pipe-Arches	*908.07*	*M 36*		*ITM 806, Procedure O*

REVISION TO 2024 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
SECTION 908 – METAL PIPE
908.01 ~~Blank~~*Metal Pipe Requirements*

Polymer Precoated Galvanized Corrugated Steel Culvert Pipe and Pipe-Arches	*908.08*	*M 245*		*ITM 806, Procedure O*
Slotted Drain Pipe	*908.14*	*pipe: M 36*	*grate: A36, grade 36*	*ITM 806, Procedure O*
Not required to be furnished from the QPL:				
Cast Iron Soil Pipe	*908.10*		*A74*	*Buy America Certification*
Steel Pipe	*908.11*		*A139, grade B or A53 Type E, grade B*	*~~ITM 806, Procedure O~~Type C Certification; Buy America Certification*
Structural Plate Pipe, Pipe-Arches, and Arches; Aluminum Alloy	*908.09(b)*	*M 219*		*~~ITM 806, Procedure O~~Certified Mill Report; Fabricator Certification; Buy America Certification*
Structural Plate Pipe, Pipe-Arches, and Arches; Steel	*908.09(a)*	*M 167 and LRFD Bridge Construction Specifications*		*~~ITM 806, Procedure O~~Certified Mill Report; Fabricator Certification; Build America Certification*

COMMENTS AND ACTION

715.02 Materials
907.16 Thermoplastic Pipe Requirements
908.01 ~~Blank~~*Metal Pipe Requirements*

DISCUSSION:
Mr. Reilman introduced and presented this item. Unfortunately, the QPL mentioned in the new 908.01 section was not created.

Mr. Reilman responded to Ms. Mouser's question as to when the new QPL will be available online, by stating it should be available in the next few days.

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

Motion: Mr. Reilman Second: Mr. White Ayes: 10 Nays: 0 FHWA Approval: YES	**Action:** X Passed as Submitted ___ Passed as Revised ___ Withdrawn
2024 Standard Specifications Sections: 715 pg. 734 – 736; 907 pg. 1031 -1032; 908.01 pg.1036. Recurring Special Provisions or Plan Details: 715-R-764 PIPE CULVERTS, AND STORM AND SANITARY SEWERS. Standard Drawing affected: NONE Design Manual Chapter: NONE GIFE Section: NONE	X 2026 Standard Specifications ___ Revise Pay Items List ___ Notification to Designers if change is not addressed by RSP ___ Create RSP (No.___) Effective: X Revise RSP (No. 715-R-764) Effective: December 1, 2024 ___ Standard Drawing Effective: ___ Create RPD (No. ___) Effective: ___ GIFE Update X Frequency Manual Update X SiteManager Update