### IOWA DEPARTMENT OF TRANSPORTATION

**To Office:** Specification Committee **Date:** October 3, 2024

Attention: Ref. No.: 305

From: Eric Johnsen, P.E.

Office: Specifications

**Subject:** Revised Agenda for October 10, 2024, Specification Committee Meeting

The Specification Committee will meet on Thursday, October 10, 2024, at 9:00 a.m.

The revised agenda is as follows:

### 1. Article 1102.17, D, 2, g, Transportation or Hauling of Materials. (REVISED)

The Civil Rights and Construction and Materials Bureaus request to update the DBE trucking specifications to an alternative method of counting DBE trucking participation.

### 2. Article 2214.03, B, 6, Pavement Scarification. (REVISED)

The Construction and Materials Bureau requests to eliminate confusion regarding scarification for PCC overlay projects.

### 3. Article 2301.02, C, 3, Portland Cement Concrete Pavement.

The Construction and Materials Bureau requests to specify using daily totals for delivery tolerance.

### 4. Article 2317.03, B, 1, Primary and Interstate Pavement Smoothness.

The Construction and Materials Bureau requests to eliminate confusion regarding single lift overlay smoothness.

### 5. Article 2426.02, B, 2, Structural Concrete Repair.

The Construction and Materials Bureau requests to add an air content requirement when Class O concrete is used for structural repair.

### 6. Article 2528.01, C, 1, Traffic Quality Control (Traffic Control).

The Construction and Materials Bureau requests to add a new class to the approved traffic control technician training requirements.

### 7. Section 4111, Class L Fine Aggregate for Portland Cement Concrete.

The Construction and Materials Bureau requests to delete Class L fine aggregate due to a lack of use.

# 8. Article 4112.03, B, Pea Gravel (Intermediate Aggregate for Portland Cement Concrete) Article 4115.02, Quality (Coarse Aggregate for Portland Cement Concrete)

The Construction and Materials Bureau requests to eliminate a redundant coal and shale requirement.

### 9. Article 4116.03, B, Class V Aggregate for Portland Cement Concrete.

The Construction and Materials Bureau requests to eliminate mortar strength requirement.

### 10. Section 4127, Aggregate for Flexible Paving Mixtures.

The Construction and Materials Bureau requests to correct a typo and eliminate an obsolete note.

### 11. Article 4131.03, Porous Backfill Material.

The Construction and Materials Bureau requests to set specification limits for clay lumps and friable particles.

### 12. Article 4132.03, Special Backfill Material.

The Construction and Materials Bureau requests to eliminate non-applicable testing.



### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Niki Rainey / Wes Musgrove			Office: Civil Rights / Construction & Mater	ials	Item 1
Submittal Date: August 16, 2024			Proposed Effective Date: April 2025		
Article No.: 1102.17, D, 2, g Title: Transportation or Hauling of Materials		Other:			
Specification (	Committee Action:				
Specification (	Committee Action: Not Approved:	Approve	ed Date:	Effective I	Date:
Deferred:			ed Date:	Effective [	Date:

### **Specification Section Recommended Text:**

1102.17, D, 2, g.

### Replace Articles 1 through 3:

- 1) The DBE shall be responsible for the management and supervision of the entire trucking operation, and there cannot be a contrived arrangement for the purpose of meeting the DBE commitment. The DBE shall maintain strict records to verify the amount of hauling done by each trucker for the duration of the contract. These records shall be made available to the Engineer if requested.
- 2) The Civil Rights Bureau will maintain a truck roster for each DBE that performs trucking. Each truck on the truck roster shall be either owned by the DBE or controlled by the DBE under a lease. Trucks that are leased shall be from a firm that is in the commercial leasing business; the owner of the commercial leasing business cannot be a heavy-highway contractor. The DBE firm shall make the lease agreement available to the Department the lease agreement if requested.
- 3) To meet the DBE commitment, the following conditions shall be used:
  - At least one fully licensed, insured, and operational DBE-owned and operated truck, listed on the truck roster under the DBE trucking company shown on the Form 102115, shall be hauling on the project at all times. The Contractor will receive credit for the fee total value of the transportation services provided by and paid to the DBE for these trucks.
  - **b** 4)The DBE trucker may use trucks from another DBE firm, including a DBE owner-operator. Any truck on the truck roster of another DBE may be used. There is no limitation to the number of these trucks that can be used. The Contractor will receive credit for the fee total value of the transportation services provided by and paid to the DBE for these trucks.
- 5) The DBE trucker may use trucks from a non-DBE truck leasing company and use its own employees as drivers. The Contractor will receive credit for the total value of the transportation services provided by and paid to the DBE for these trucks.
  - 6 6) A The DBE trucker may also use trucks from a non-DBE firm, including from an owner-operator. The Contractor will receive credit toward the DBE commitment only for the fee or commission retained by the DBE trucker. The Contractor will not receive credit for the total amount paid for the truck because the DBE was a lessee rather than the actual provider of transportation services. The Contractor will receive credit for the total value of the transportation services provided by and paid to the DBE for these

trucks, not to exceed the value of transportation services provided by the DBE trucker using DBE-owned, leased and operated trucks. For additional participation by non-DBE owned and operated trucks, the Contractor will receive credit only for the fee or commission paid to the DBE trucker for the truck lease or cost component of the transportation services provided.

- 7) The Contractor shall submit DBE truck tracking sheets to the Engineer on a daily basis using Form 650041 detailing all DBE-managed trucks hauling on the project each day, and their status as per Articles 3 thru 6 above. Additionally, when a DBE trucker elects to use a non-DBE owner-operator, the Contractor shall provide documentation of the value of all such transportation services upon contract completion, and verification that they do not exceed the value of transportation services provided by the DBE trucker using DBE-owned, leased and operated trucks as per Article 6 above.
- 8) For purposes of these requirements, a lease must indicate that the DBE trucker has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. All leased trucks must display the name and identification number of the DBE trucker.

**Comments:** Item was deferred from the September Specification Committee Meeting. The following are the notes from that meeting:

The Construction and Materials Bureau pointed out that these revisions are not required, as there are two FHWA methods for calculating DBE trucking and this would just be a change from one method to the other. We are not required to implement this change to meet FHWA rules, but are proposing to at the request of the AGC.

The FHWA outlined that the administration of the new rules will require new procedures that are not developed yet and could be quite burdensome to inspectors. FHWA has approved the revisions based on the development of these new procedures. FHWA also pointed out that there will be more focus on tracking DBE trucking usage daily that is not currently being done whether the specification is revised or not.

The county advisory members expressed apprehension on administering federal aid projects with DBE goals involving trucking when they don't have these contracts very often. They requested that the revisions not be applied to local contracts or not be approved. The Civil Rights Bureau indicated that we would not have different rules for implementing a federal program for primary and local contracts. FHWA concurred and indicated that maybe DBE goal assignment could consider local vs. primary for this reason.

The Contracts and Specifications Bureau pointed out that with a November implementation on contracts, there will be some time before most of these projects start to get new procedures in place. Local Systems staff and others at the DOT will be available to assist locals if they have projects with DBE trucking.

Construction and Materials pointed out that recent issues with DBE trucking administration would not be addressed by these revisions.

Due to concerns about the administrative burden of the new rules, not having procedures in place to know what that administrative burden will be, and Wes and Niki needing to leave the discussion early, these revisions have been deferred to the October Specification Committee Meeting for further discussion. If the item is approved at the October meeting, it could still be implemented for the November letting as previously discussed with AGC.

Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight.)

### 1102.17 DISADVANTAGED BUSINESS ENTERPRISES.

D. Counting DBE Participation Toward Meeting Goals.

- 1. The Contractor may count toward the goals only expenditures to DBEs that perform a commercially useful function towards the completion of a contract, including those functions as a subcontractor. Work performed by a DBE firm in a particular transaction may be counted toward the goal only if the Department determines that it involves a commercially useful function. The work performed by the DBE firm shall be necessary and useful to the completion of the contract, and consistent with normal highway construction industry practices in lowa.
- 2. The bidder may count the following DBE expenditures towards the DBE commitment:
  - g. Transportation or Hauling of Materials If a DBE trucking company picks up a product from a manufacturer or regular dealer and delivers the product to the Contractor, the commercially useful function performed is not that of a supplier, but that of a transporter of goods. Unless the DBE company is itself the manufacturer or a regular dealer in the product, credit only will be allowed for the cost of the transportation service. For transportation of materials by truck to be used toward meeting the DBE commitment, the following shall apply:
    - The DBE shall be responsible for management and supervision of the entire trucking operation. The DBE shall maintain strict records to verify the amount of hauling done by each trucker for the duration of the contract. These records shall be available to the Engineer, upon request.
    - The DBE shall be responsible for the management and supervision of the entire trucking operation, and there cannot be a contrived arrangement for the purpose of meeting the DBE commitment. The DBE shall maintain strict records to verify the amount of hauling done by each trucker for the duration of the contract. These records shall be made available to the Engineer if requested.
    - 2) The Civil Rights Bureau will maintain a truck roster for each DBE that performs trucking. Each truck on the truck roster shall be either owned by the DBE or controlled by the DBE under a lease. Trucks that are leased shall be from a firm that is in the commercial leasing business; the owner of the commercial leasing business cannot be a heavy-highway contractor. The DBE firm shall make the lease agreement available to the Department the lease agreement if requested.
    - 3) To meet the DBE commitment, the following conditions shall be used:
      - a) At least one fully licensed, insured, and operational truck, listed on the truck roster under the DBE trucking company shown on the <u>Form 102115</u>, shall be hauling on the project at all times. The Contractor will receive credit for the fee paid to the DBE for these trucks.
      - b) Any truck on the truck rester of another DBE may be used. There is no limitation to the number of these trucks that can be used. The Contractor will receive credit for the fee paid to the DBE for these trucks.
      - c) A DBE trucker may also use trucks from a non-DBE firm, including an owner operator. The Contractor will receive credit toward the DBE commitment only for the fee or commission retained by the DBE trucker. The Contractor will not receive credit for the total amount paid for the truck because the DBE was a lessee rather than the actual provider of transportation services.
    - 3) At least one fully licensed, insured, and operational DBE-owned and operated truck, listed on the truck roster under the DBE trucking company shown on the <u>Form 102115</u>, shall be hauling on the project at all times. The Contractor will receive credit for the total value of the transportation services provided by and paid to the DBE for these trucks.
    - 4) The DBE trucker may use trucks from another DBE firm, including a DBE owner-operator. Any truck on the truck roster of another DBE may be used. There is no limitation to the number of these trucks that can be used. The Contractor will receive credit for the total value of the transportation services provided by and paid to the DBE for these trucks.
    - 5) The DBE trucker may use trucks from a non-DBE truck leasing company and use its own employees as drivers. The Contractor will receive credit for the total value of the transportation services provided by and paid to the DBE for these trucks.

- 6) The DBE trucker may use trucks from a non-DBE firm, including from an owner-operator. The Contractor will receive credit for the total value of the transportation services provided by and paid to the DBE for these trucks, not to exceed the value of transportation services provided by the DBE trucker using DBE-owned, leased and operated trucks. For additional participation by non-DBE owned and operated trucks, the Contractor will receive credit only for the fee or commission paid to the DBE trucker for the truck lease or cost component of the transportation services provided.
- 7) The Contractor shall submit DBE truck tracking sheets to the Engineer on a daily basis using Form 650041 detailing all DBE-managed trucks hauling on the project each day, and their status as per Items 3 thru 6 above. Additionally, when a DBE trucker elects to use a non-DBE owner-operator, the Contractor shall provide documentation of the value of all such transportation services upon contract completion, and verification that they do not exceed the value of transportation services provided by the DBE trucker using DBE-owned, leased and operated trucks as per Item 6 above.
- 8) For purposes of these requirements, a lease must indicate that the DBE trucker has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. All leased trucks must display the name and identification number of the DBE trucker.

**Reason for Revision:** To revise our current more-restrictive DBE trucking specification requirements to match 49 CFR 26.55 (d) requirements.

Exact language from 49 CFR 26.55 (d) (1-7) is below for convenient reference:

- (1) The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting DBE goals.
- (2) The DBE must itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
- (5) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE that leases trucks equipped with drivers from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE leased trucks equipped with drivers not to exceed the value of transportation services on the contract provided by DBE-owned trucks or leased trucks with DBE employee drivers. Additional participation by non-DBE owned trucks equipped with drivers receives credit only for the fee or commission it receives as a result of the lease arrangement. If a recipient chooses this approach, it must obtain written consent from the appropriate DOT operating administration.

### Example to paragraph (d)(5):

DBE Firm X uses two of its own trucks on a contract. It leases two trucks from DBE Firm Y and six trucks equipped with drivers from non-DBE Firm Z. DBE credit would be awarded for the total value of transportation services provided by Firm X and Firm Y, and may also be awarded for the total value of transportation services provided by four of the six trucks provided by Firm Z. In all, full credit would be allowed for the participation of eight trucks. DBE credit could be awarded only for the fees or commissions pertaining to the remaining trucks Firm X receives as a result of the lease with Firm Z. (6) The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is

entitled to credit for the total value of these hauling services. **Example to paragraph (d)(6):** 

DBE Firm X uses two of its own trucks on a contract. It leases two additional trucks from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all four trucks.

(7) For purposes of this <u>paragraph (d)</u>, a lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

New Bid Item Required (X one)	Yes	No X
Bid Item Modification Required (X one)	Yes	No X
Bid Item Obsoletion Required (X one)	Yes	No X

### Comments:

### **County or City Comments:**

Industry Comments: AGC is supportive and this version reflects their input as of Aug 8, 2024.



### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by:	Wes Musgrove/Elijah (	Gansen	Bureau/Office: Cons and Materials	struction	Item 2
Submittal Date: 9/23/2024 Proposed Effective Date		Date: 4/202	5		
Article No.:	2214.01, A		Other:		
Article No.:	2214.03, B, 6				
Title: Paveme	ent Scarification				
Specification (	Committee Action:				
Defermed	Not Annoused	A	d Doto.	Effection 1	2-4

Deferred: Not Approved: Approved Date: Effective Date:

### **Specification Committee Approved Text:**

#### Comments:

### **Specification Section Recommended Text:**

### 2214.01, A.

### Replace the Article:

Scarify asphalt or PCC pavement to improve surface profile and/or cross section in preparation for resurfacing, using the following methods:

- 1. Scarify Nominal Thickness scarify to remove a nominal uniform thickness at the same cross slope as the existing pavement.
- 2. Scarify Cross Slope scarify at the specified slope. Refer to project plans to determine if a nominal thickness at a specific location within the area to be scarified is also required.
- 3. Scarify Profile scarify to a profile at the specified cross slope.

### 2214.03, B, 6.

### **Add** the Article and **renumber** existing Article c:

- c. When a proposed profile is provided in the contract documents or a profile is to be developed by the contractor for construction, scarify the surface using a machine with automatic horizontal and vertical control that is capable of milling to the approved profile and cross slope with a tolerance of +0 inches to -1/4 inch. Control scarifying operations to provide a surface that is true to line and grade with the specified cross slope.
- **e d.** When asphalt material is salvaged for recycling, comply with the following additional requirements:

Comments: Do we need separate bid items for the three methods of scarification?

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use <del>Strikeout</del> and Highlight.) 2214.01 DESCRIPTION.

- **B.** Scarify asphalt or PCC pavement to improve surface profile and/or cross section in preparation for resurfacing, using the following methods:
  - Scarify Nominal Thickness scarify to remove a nominal uniform thickness at the same cross slope as the existing pavement.

- Scarify Cross Slope scarify at the specified slope. Refer to project plans to determine if a nominal thickness at a specific location within the area to be scarified is also required.
- 3. Scarify Profile scarify to a profile at the specified cross slope.

### 2214.03, B, 6,

- c. When a proposed profile is provided in the contract documents or a profile is to be developed by the contractor for construction, scarify the surface using a machine with automatic horizontal and vertical control that is capable of milling to the approved profile and cross slope with a tolerance of +0 inches to -1/4 inch. Control scarifying operations to provide a surface that is true to line and grade with the specified cross slope.
- **ed.** When asphalt material is salvaged for recycling, comply with the following additional requirements:

**Reason for Revision:** On PCC overlay projects there is often confusion about the requirements for the scarifying that is performed before the overlay. The proposed revision provides the requirements for that work.

New Bid Item Required (X one)	Yes X	No
Bid Item Modification Required (X one)	Yes	No X
Bid Item Obsoletion Required (X one)	Yes X	No

Comments: New bid item names: Scarification, Nominal Thickness; Scarification, Cross Slope

Correction; Scarification, Profile

Unit of Measure: SY

Delete bid item: Scarification with unit of measure SY

County or City Comments: Not circulated to County or City due to them not performing this type of

work.

Industry Comments: Comments from PCC industry incorporated into this document.



Submitted by: Wes Musgrove / Todd Hanson Bureau/Office: Construction & Materials  Submittal Date: September 23 2024 Proposed Effective Date: April 2025  Article No.: 2301.02, C, 3 Title: Portland Cement Concrete Pavement  Specification Committee Action:				
Article No.: 2301.02, C, 3 Title: Portland Cement Concrete Pavement  Specification Committee Action:				
Title: Portland Cement Concrete Pavement  Specification Committee Action:				
Specification Committee Action:				
· .				
Deferred: Not Approved: Approved Date: Effective Date:				
Specification Committee Approved Text:				
Comments:				
Specification Section Recommended Text: 2301.02, C, 3, Measurement of Materials.  Add the Article:  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.				
2301.02, C, 3, Measurement of Materials.  Add the Article:  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.				
2301.02, C, 3, Measurement of Materials.  Add the Article:				
2301.02, C, 3, Measurement of Materials.  Add the Article:  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Comments:  Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight. 2301.02, C, 3 add paragraph i.  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.				
2301.02, C, 3, Measurement of Materials.  Add the Article:  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Comments:  Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight. 2301.02, C, 3 add paragraph i.				
2301.02, C, 3, Measurement of Materials.  Add the Article:  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Comments:  Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight. 2301.02, C, 3 add paragraph i.  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Reason for Revision: Individual batches may likely have some materials outside of the 1% delivery tolerance, especially materials weighed in lower amounts. Follow delivery tolerance instructions in IM				
2301.02, C, 3, Measurement of Materials.  Add the Article:  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Comments:  Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight. 2301.02, C, 3 add paragraph i.  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Reason for Revision: Individual batches may likely have some materials outside of the 1% delivery tolerance, especially materials weighed in lower amounts. Follow delivery tolerance instructions in IM 527 using daily totals as opposed to an individual batch.				
2301.02, C, 3, Measurement of Materials.  Add the Article:  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Comments:  Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight. 2301.02, C, 3 add paragraph i.  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Reason for Revision: Individual batches may likely have some materials outside of the 1% delivery tolerance, especially materials weighed in lower amounts. Follow delivery tolerance instructions in IM 527 using daily totals as opposed to an individual batch.  New Bid Item Required (X one)  Yes  No X				
2301.02, C, 3, Measurement of Materials.  Add the Article:  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Comments:  Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight. 2301.02, C, 3 add paragraph i.  i. Use daily totals for delivery tolerance, in accordance with Materials I.M 527.  Reason for Revision: Individual batches may likely have some materials outside of the 1% delivery tolerance, especially materials weighed in lower amounts. Follow delivery tolerance instructions in IM 527 using daily totals as opposed to an individual batch.  New Bid Item Required (X one) Yes No X  Bid Item Modification Required (X one) Yes No X				

**Industry Comments:** Industry has been notified and agrees with the change.



### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove/Jeff De Vries	<b>Bureau/Office:</b> Construction and Materials	Item 4
Submittal Date: 9/18/2024	Proposed Effective Date: April 2	2025
Article No.: 2317.03, B, 1  Title: Primary and Interstate Pavement Smoothness	Other:	
Specification Committee Action:		

Deferred: Not Approved: Approved Date: Effective Date:

### **Specification Committee Approved Text:**

### **Comments:**

### **Specification Section Recommended Text:**

2317.03, B, 1.

### Replace Articles h and i:

- **h.** Single lift flexible pavement overlays 2 inches thick or less, unless the existing surface has been corrected by milling or scarification.
- i. Single lift flexible pavement overlays 2 inches thick or less placed directly on PCC pavement.

#### Comments:

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use <del>Strikeout</del> and Highlight.) 2317.03 TESTING AND EVALUATION.

### B. Evaluation.

- Determine an MRI using the latest version of the ProVAL "Ride Quality" or "Smoothness Assurance" analysis and following the procedures shown in <u>Materials I.M. 341, Appendix A</u> for each segment of finished pavement surface with a posted speed or advisory speed over 45 mph except for:
  - h. Single lift flexible pavement overlays 2 inches thick or less, unless the existing surface has been corrected by milling or scarification.
  - i. Single lift flexible pavement overlays 2 inches thick or less placed directly on PCC pavement.

**Reason for Revision:** The intent of 2317.03.B.1.h and i was to address difficulties with single lift flexible (HMA) smoothness. Adding "flexible" should eliminate any confusion on evaluation of PCC overlays.

New Bid Item Required (X one)	Yes	No
Bid Item Modification Required (X one)	Yes	No
Bid Item Obsoletion Required (X one)	Yes	No
Comments:	•	

<b>County or City Comments:</b>	
Industry Comments:	



### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by:	Wes Musgrove / Curt	Submitted by: Wes Musgrove / Curtis Carter		Bureau/Office: Construction & Item 5 Materials		
Submittal Date: 9/23/2024		Proposed Effective Date: April, 2025				
Article No.: 2426.02, B, 2 Title: Structural Concrete Repair			Other:			
Specification Committee Action:						
Specification (	Committee Action:					
Specification (	Committee Action: Not Approved:	Approve	d Date:	Effective I	Date:	
Deferred:		• •	d Date:	Effective I	Date:	

### 2426.02, B, 2, Regular Repair.

**Specification Section Recommended Text:** 

Replace the Article:

Furnish Class O concrete. Materials I.M. 447 provides for use of packaged, dry, combined materials for Class O PC concrete. Use 3 inches as the target slump, with a variation not to exceed ± 1 inch. For placements requiring higher slump, a mid range water reducer may be used with a target slump of 5 inches or a high range water reducer may be used with a target slump of 7 inches. Use Class O PCC meeting the requirements of Materials I.M. 529 and the following. Class O PCC batched in accordance with these requirements need not classify as low slump concrete.

- **a.** Limit maximum water-to-cement ratio to 0.400.
- **b.** Use 3 inches as the target slump, with a variation not to exceed ± 1 inch. For placements requiring higher slump, a mid range water reducer may be used with a target slump of 5 inches, or a high range water reducer may be used with a target slump of 7 inches.
- **c.** Desired air entrainment of the finished concrete is typically 6%. Unless noted otherwise, ensure the air content of fresh, unvibrated concrete at the time of placement, as determined by Materials I.M. 318, is 6.5% with a maximum variation of plus 2.0% and minus 1.0%. Air entrainment and air testing are waived for the following applications:
  - Repairs to precast and prestressed concrete bridge beams.
  - Repairs which are proportioned and batched on site with individual batch volumes not exceeding 0.75 cubic yard.
  - Repairs which use pre-packaged, dry, combined materials for Class O PCC in accordance with Materials I.M. 447.

### **Comments:**

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use <del>Strikeout</del> and Highlight.) Revise 2426.02, B, 2 as follows:

2. Regular Repair.

Furnish Class O concrete. Materials I.M. 447 provides for use of packaged, dry, combined materials for Class O PC concrete. Use 3 inches as the target slump, with a variation not to exceed  $\pm$  1 inch.

For placements requiring higher slump, a mid range water reducer may be used with a target slump of 5 inches or a high range water reducer may be used with a target slump of 7 inches. Use Class O PCC meeting the requirements of Materials I.M. 529 and the following. Class O PCC batched in accordance with these requirements need not classify as low slump concrete.

- d. Limit maximum water-to-cement ratio to 0.400.
- e. Use 3 inches as the target slump, with a variation not to exceed ± 1 inch. For placements requiring higher slump, a mid range water reducer may be used with a target slump of 5 inches or a high range water reducer may be used with a target slump of 7 inches.
- f. Desired air entrainment of the finished concrete is typically 6%. Unless noted otherwise, ensure the air content of fresh, unvibrated concrete at the time of placement, as determined by Materials I.M. 318, is 6.5% with a maximum variation of plus 2.0% and minus 1.0%. Air entrainment and air testing are waived for the following applications:
  - Repairs to precast and prestressed concrete bridge beams.
  - Repairs which are proportioned and batched on site with individual batch volumes not exceeding 0.75 cubic yard.
  - Repairs which use pre-packaged, dry, combined materials for Class O PCC in accordance with Materials I.M. 447.

**Reason for Revision:** This proposed revision is in response to deferred Agenda Item 2 (and associated industry comments) as documented in the minutes of the August, 2024 Specifications Committee Meeting.

Intent of the current (and original) proposal is to introduce an air content requirement, to the extent practical, when Class O concrete is used for structural repair. Air content of approximately 6.0% is generally desired for structural repair concrete. This proposal adds air entrainment/testing requirement for Class O concrete for structural repair (2426), consistent with the air entrainment/testing requirement for Class O concrete used for bridge deck overlay (2413.02, D, 1, a, 2), and ready-mixed Class O concrete used for partial depth bridge deck patching (DS-23012.03, A, 4, a). It is acknowledged that air content can be impractical to apply/test for small volume, pre-packaged and/or site mixed repair material, therefore this proposal includes waiver of air entrainment/testing for limited situations where testing is deemed impractical or unnecessary.

In response to industry comments associated with the August 2024 version of this submittal:

- The statement "perform deck repair in accordance with Article 2413" was omitted from this version.
  It is agreed that this statement could be a source of confusion. Although Article 2426 is not intended as a comprehensive specification for widespread bridge deck patching/repair efforts (Article 2413 or DS-23012 would be better), this does not need to be explicitly stated in Article 2426.
- It is not the intent of this proposal to create new opportunity for Class O to be mixed by ready mix, nor is it the intent to create new use cases for Class O mix. The revision is intended to address use cases and mixing methods that currently exist for Class O. Although I.M. 529 denotes Class O as a low-slump overlay mix, multiple existing specification documents specify use of Class O for applications other than low-slump overlay (Article 2426, DS-23012, Bridge Standard 1045, Bridge Standard 1057). The industry comment is accurate that Class O and Class M are essentially the same, other than slump and aggregate size requirements, and it could be reasonable to call the repair mix a Class M instead of a Class O. However, since there are already multiple specification documents that specify this structural repair mix as Class O, it was decided to maintain the mix name as Class O in Article 2426 (to avoid having to chase/change a renamed mix in multiple other locations). The proposal language was reworded to clarify that, when used for structural repair, Class O is not a low-slump mix. For purposes of structural repair, the requirements of Article 2426 will prevail over I.M. 529, and the Class O structural repair mix can be batched with higher slump, in a ready mix truck at the contractor's/producer's option.

New Bid Item Required (X one)	Yes	No X	
Bid Item Modification Required (X one)	Yes	No X	
Bid Item Obsoletion Required (X one)	Yes	No X	
Comments:			
County or City Comments:			
Industry Comments:			



### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Brian Worrel	Bureau/Office: Construction & Materials	Item 6
Submittal Date: September 5, 2024	Proposed Effective Date: April 2	2025
Article No.: 2528.01, C, 1  Title: Traffic Quality Control (Traffic Control)	Other:	

### **Specification Committee Action:**

Deferred: Not Approved: Approved Date: Effective Date:

**Specification Committee Approved Text:** 

**Comments:** 

**Specification Section Recommended Text:** 

2528.01, C, 1.

### Replace the second sentence:

The trained Traffic Control Technician is required to have attended and passed the exam in an ATSSA Traffic Control Technician, IMSA Work Zone Traffic Control, Iowa AGC Traffic Control Technician, Minnesota DOT Traffic Control Supervisor, or Texas Engineering Extension Service Work Zone Traffic Control training class, or LIUNA Training & Education Fund Traffic Control Supervisor training class.

### **Comments:**

### Member's Requested Change: (Do not use 'Track Changes', or 'Mark-Up'. Use Strikeout and Highlight.)

Maintain a Traffic Control Technician on staff, even though the traffic control portion of the contract may be subcontracted. The Traffic Control Technician is required to have attended and passed the exam in an ATSSA Traffic Control Technician, IMSA Work Zone Traffic Control, Iowa AGC Traffic Control Technician—class, Minnesota DOT Traffic Control Supervisor training class, or—Texas Engineering Extension Service Work Zone Traffic Control training class, or LIUNA Training & Education Fund Traffic Control Supervisor training class. This Traffic Control Technician is responsible for overall management of the Contractor's quality control program for traffic control. Starting April 2018, the Traffic Control Technician shall retake and pass the exam in one of the approved classes every 5 years.

**Reason for Revision:** Addition of a new class to the approved list for Traffic Control Technician training requirements. DOT work zone team has reviewed the course materials and deemed it an acceptable addition.

New Bid Item Required (X one)	Yes	No X
Bid Item Modification Required (X one)	Yes	No X
Bid Item Obsoletion Required (X one)	Yes	No X

### Comments:

**County or City Comments:** 

**Industry Comments:** 



#### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by Section	gg.		Bureau: Construct Materials	ction &	Item 7
Submittal Date: 9/18/2024		Proposed Effective Date: April 2025			
Section No.: 4111					
Cement Conc	Fine Aggregate for Po rete	rtiand			
Specification Committee Action:					
Deferred: Not Approved: Approved		d Date:	Effective Date	e:	

**Specification Committee Approved Text:** 

Comments:

**Specification Section Recommended Text:** 

4111, Class L Fine Aggregate for Portland Cement Concrete.

**Delete** the Section:

Section 4111. Class L Fine Aggregate for Portland Cement Concrete

### 4111.01 DESCRIPTION.

Natural sands resulting from disintegration of rock through erosional processes. Acquire mineral aggregate from an approved source as described in Materials I.M. 409. Use Class L fine aggregate in Class L concrete mixtures as specified in Materials I.M. 529.

### 4111.02 GRADATION.

Meet the requirements for Gradation No. 1 of the Aggregate Gradation Table, Article 4109.02. No more than 45% is to pass one sieve and be retained on the sieve with the next higher number when the fine aggregate is sieved through the following sieves: No. 4, No. 8, No. 16, No. 30, No. 50, and No. 100.

### 4111.03 QUALITY.

Meet the requirements of Table 4111.03-1:

#### Table 4111.03-1: Test Limits and Methods

Fine Aggregate Quality	Test Limits	Test Method		
Shale and Coal	2.0% (maximum)	Materials I.M. 344		
Mortar Strength	5200 psi (minimum)	lowa DOT Materials Laboratory Test Method No. 212		

### **Comments:**

Section 4111. Class L Fine Aggregate for Portland Cement Concrete

Action Item: Delete entire Section.

### Section 4111. Class L Fine Aggregate for Portland Cement Concrete

### 4111.01 DESCRIPTION.

Natural sands resulting from disintegration of rock through erosional processes. Acquire mineral aggregate from an approved source as described in Materials I.M. 409. Use Class L fine aggregate in Class L concrete mixtures as specified in Materials I.M. 529.

### 4111.02 GRADATION.

Meet the requirements for Gradation No. 1 of the <u>Aggregate Gradation Table, Article 4109.02</u>. No more than 45% is to pass one sieve and be retained on the sieve with the next higher number when the fine aggregate is sieved through the following sieves: No. 4, No. 8, No. 16, No. 30, No. 50, and No. 100.

### 4111.03 QUALITY.

Meet the requirements of Table 4111.03-1:

### Table 4111.03-1: Test Limits and Methods

Fine Aggregate Quality	Test Limits	Test Method
Shale and Coal	2.0% (maximum)	Materials I.M. 344
Mortar Strength	<del>5200 psi (minimum)</del> -	lowa DOT Materials Laboratory Test Method No. lowa 212

**Reason for Revision** The 4111 Class L fine aggregate has not been used in the last 30 years (or more). We feel this specification is no longer necessary. It was a finer aggregate than most 4110 sand.

New Bid Item Required (X one)	Yes	No x
Bid Item Modification Required (X one)	Yes	No x
Bid Item Obsoletion Required (X one)	Yes	No x

### Comments:

**County or City Comments:** 

Industry Comments:..



### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Geology Section	Bureau: Construction & Materials	Item 8
Submittal Date: 9/18/2024	Proposed Effective Date: April 20	25
<b>Article No.:</b> 4112.03, B		
<b>Title:</b> Pea Gravel (Intermediate Aggregate for Portland Cement Concrete)		
<b>Article No.:</b> 4115.02		
<b>Title:</b> Quality (Coarse Aggregate for Portland Cement Concrete)		

### **Specification Committee Action:**

Deferred: Not Approved: Approved Date: Effective Date:

### **Specification Committee Approved Text:**

### Comments:

### **Specification Section Recommended Text:**

4112.03, B, Pea Gravel.

### **Replace** Table 4112.03-2:

Table 4112.03-2: Maximum Permissible Amounts of Objectionable Materials

Objectionable Materials.	Maximum Percent Allowed	Test Method
Coal and carbonaceous shale	<del>0.5</del>	AASHTO T 113
Total of all shale, similar objectionable materials, coal and iron combined	1.0	AASHTO T 113
Organic Materials, except coal	0.01	Iowa DOT Materials Laboratory Test Method No. 215
Unsound chert particles retained on 3/8 inch sieve (Nonstructural concrete)	3.0	Materials I.M. 372
Unsound chert particles retained on 3/8 inch sieve (Structural concrete)	2.0	Materials I.M. 372

Note: Chert particle which break into three or more pieces when subjected to the freezing and thawing test will be considered unsound.

Chert in aggregate produced from limestone sources is defined as unsound when any of the fractions of the crushed or uncrushed chert do not meet the soundness requirements.

### 4115.02, Quality.

### Replace Table 4115.02-2:

Table 4115.02-2: Maximum Permissible Amounts of Objectionable Materials

Objectionable Materials.	Maximum Percent Allowed	Test Method
Coal and carbonaceous shale	<del>0.5</del>	Materials I.M. 372
Total of all shale, similar objectionable materials, and coal combined	1.0	Materials I.M. 372
Organic Materials, except coal	0.01	lowa DOT Materials Laboratory Test Method No. 215
Unsound chert particles retained on 3/8 inch sieve (Nonstructural concrete)	3.0	Materials I.M. 372
Unsound chert particles retained on 3/8 inch sieve (Structural concrete)	2.0	Materials I.M. 372

Note: Chert particle which break into three or more pieces when subjected to the freezing and thawing test will be considered unsound.

Chert in aggregate produced from limestone sources is defined as unsound when any of the fractions of the crushed or uncrushed chert do not meet the soundness requirements.

### Comments:

### Section 4112. Intermediate Aggregate for Portland Cement Concrete

Action: Remove Coal and carbonaceous shale specification

### 4112.03 QUALITY.

### B. Pea Gravel.

Meet the requirements of Table 4112.03-2:

**Table 4112.03-2: Maximum Permissible Amounts of Objectionable Materials** 

Objectionable Materials.	Maximum Percent Allowed	Test Method
Coal and carbonaceous shale	<del>0.5</del>	Materials I.M. 372
Total of all shale, similar objectionable materials, and coal combined	1.0	Materials I.M. 372
Organic Materials, except coal	0.01	lowa DOT Materials Laboratory Test Method 215
Unsound chert particles retained on 3/8 inch sieve (Nonstructural concrete)	3.0	Materials I.M. 372
Unsound chert particles retained on 3/8 inch sieve (Structural concrete)	2.0	Materials I.M. 372

Note: Chert particles which break into three or more pieces when subjected to the freezing and thawing test will be considered unsound.

Chert in aggregate produced from limestone sources is defined as unsound when any of the fractions of the crushed or uncrushed chert do not meet the soundness requirements.

### Section 4115. Coarse Aggregate for Portland Cement Concrete

Action: Remove Coal and carbonaceous shale specification

#### 4115.02 QUALITY.

Meet the requirements of Tables 4115.02-1 and 4115.02-2 and Section 4109:

**Table 4115.02-2: Maximum Permissible Amounts of Objectionable Materials** 

Objectionable Materials.	Maximum Percent Allowed	Test Method
Coal and carbonaceous shale	<del>0.5</del>	Materials I.M. 372
Total of all shale, similar objectionable materials, and coal combined	1.0	Materials I.M. 372
Organic Materials, except coal	0.01	lowa DOT Materials Laboratory Test Method 215
Unsound chert particles retained on 3/8 inch sieve (Nonstructural concrete)	3.0	Materials I.M. 372
Unsound chert particles retained on 3/8 inch sieve (Structural concrete)	2.0	Materials I.M. 372

Note: Chert particles which break into three or more pieces when subjected to the freezing and th test will be considered unsound.

Chert in aggregate produced from limestone sources is defined as unsound when any of the fractions of the crushed or uncrushed chert do not meet the soundness requirements.

Reason for Revision: Having two Coal and Shale specifications seemed redundant and confusing to some people. The "Total of all shale similar objectionable materials, and coal combined" was more inclusive of objectionable material. Removing "Coal and carbonaceous shale" spec from 4112 will parallel 4115..

New Bid Item Required (X one)	Yes	No x
Bid Item Modification Required (X one)	Yes	No x
Bid Item Obsoletion Required (X one)	Yes	No x

**Comments:** 

**County or City Comments:** 

Industry Comments:..



### SPECIFICATION REVISION SUBMITTAL FORM

<b>Submitted by:</b> Wes Musgrove / Geology Section	Bureau: Construction & Materials	Item 9
Submittal Date: 9/18/2024	Proposed Effective Date: April 2	2025
<b>Article No.:</b> 4116.03, B		
<b>Title:</b> Class V Aggregate for Portland Cement Concrete		

### **Specification Committee Action:**

Deferred: Not Approved: Approved Date: Effective Date:

**Specification Committee Approved Text:** 

Comments:

**Specification Section Recommended Text:** 

4116.03, B.

Replace Table 4116.03-2:

Table 4116.03-2: Fine Aggregate Quality

Fine Aggregate Quality	Test Limits	Test Method
Shale and Coal	2.0 % (maximum)	Materials I.M. 344
Mortar Strength	6000 psi (minimum)	Office of Materials Test Method No. lowa 212

### Comments:

### Section 4116. Class V Aggregate for Portland Cement Concrete

Action Item: Delete Mortar Strength requirement.

Table 4116.03-2: Fine Aggregate Quality

Fine Aggregate Quality	Test Limits	Test Method
Shale and Coal	2.0 % (maximum)	Materials I.M. 344
Mortar Strength	6000 psi (minimum)	Office of Materials Test Method No. lowa 212

**Reason for Revision** The Mortar Strength test was eliminated for 4110 sands (PCC fine aggregate) some time ago and was replaced with fineness modules values. The 4116 Class V aggregate spec was not addressed at that time. Language in 409 which specs fineness modules will be changed to also address Class V sands.

New Bid Item Required (X one)	Yes	No x			
Bid Item Modification Required (X one)	Yes	No x			
Bid Item Obsoletion Required (X one)	Yes	No x			
Comments:					
County or City Comments:					
Industry Comments:					



### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by Section	: Wes Musgrove / Ge	ology	<b>Bureau:</b> Construction & Materials		Item 10	
Submittal Dat	te: 9/18/2024		Proposed Effective Date: April 2025			
Section No.: 4127 Title: Aggregate for Flexible Paving Mixtures						
Specification	Specification Committee Action:					
Deferred:	ed: Not Approved: Approve		d Date:	Effective Date	e:	
Specification	Committee Approve	d Text:				
Commonte						

## Specification Section Recommended Text:

4127.02, Coarse Aggregate.

### Replace Table 4127.02-1:

Table 4127.02-1: Coarse Aggregate Quality (Flexible Paving Mixtures)

Coarse Aggregate Quality	Type A Maximum	Maximum Maximum %		Test Method
4	%	Primary	Other	
Abrasion	45	45	45	AASHTO T 96
Absorption <sup>(a)</sup>	6.0	6.0	6.0	Iowa DOT Materials Laboratory Test Method No. 201
Alumina <sup>(b, c)</sup>	1.0	1.5	1.8	lowa DOT Materials Laboratory Test Method No. 222
A Freeze	15	25	28	lowa DOT Materials Laboratory Test Method No. 211, Method A
Clay Lumps/Friable Particles (CA) <sup>(d)</sup>	2.0	3.0	3.0	Materials I.M. 368
Organic Material	0.01	0.01	0.01	lowa DOT Materials Laboratory Test Method No. 215

- (a) When a coarse aggregate for use in asphalt fails absorption using lowa DOT Materials Laboratory Test Method No. 201; absorption determined by <u>Materials I.M. 380</u> (Vacuum-saturated specific gravity & absorption) will be used. The 6.0% maximum absorption applies.
- (b) If the Alumina value passes, the A-Freeze is not needed for specification compliance. If the Alumina value fails, determine the A Freeze value for specification compliance.
- (c) Alumina does not apply to gravel.
- (d) Coarse aggregate testing per Materials I.M. 368.

### 4127.03, A.

### **Replace** Table 4127.03-1:

Table 4127.03-1: Fine Aggregate Quality (Flexible Paving Mixtures)

Fine Aggregate	Type A	Type B	Test Method
----------------	--------	--------	-------------

Quality	Maximum %	Maximum %	
Organic Matter	0.01	0.01	Iowa DOT Materials Laboratory Test Method No. 215
Clay Lumps/Friable Particles (FA) <sup>(a)</sup>	1.5	3.0	Materials I.M. 368 <sup>(a)</sup>
Shale	2.0	5.0	Materials I.M. 344

<sup>(</sup>a) Use Method A for initial test. If Method A fails, Method B may be used. Fine aggregate testing per Materials I.M. 368.

**Comments:** Besides the typo and removing the obsolete method a/method b language, I'm not sure why we need these revisions. We already reference Materials I.M. 368 as the test method and the table titles differentiate between coarse aggregate and fine aggregate.

### Section 4127. Aggregate for Flexible Paving Mixtures

### 4127.02 COARSE AGGREGATE.

Meet the requirements of Table 4127.02-1:

Table 4127.02-1: Coarse Aggregate Quality (Flexible Paving Mixtures)

Coarse Aggregate Quality	Type A Maximum	Type B Maximum %		Test Method
quanty	%	Primary	Other	
Abrasion	45	45	45	AASHTO T 96
Absorption <sup>(a)</sup>	6.0	6.0	6.0	lowa DOT Materials Laboratory Test Method No. 201
Alumina <sup>(b, c)</sup>	1.0	1.5	1.8	lowa DOT Materials Laboratory Test Method No. 222
A Freeze	15	25	28	lowa DOT Materials Laboratory Test Method No. 211, Method A
Clay Lumps/Friable Particles (CA) <sup>(d)</sup>	2.0	3.0	3.0	Materials I.M. 368
Organic Material	0.01	0.01	0.01	lowa DOT Materials Laboratory Test Method No. 215

- (a) When a coarse aggregate for use in asphalt fails absorption using Iowa DOT Materials Laboratory Test Method No. 201; absorption determined by <u>Materials I.M. 380</u> (Vacuum-saturated specific gravity & absorption) will be used. The 6.0% maximum absorption applies.
- (b) If the Alumina value passes, the A-Freeze is not needed for specification compliance. If the Alumina value fails, determine the A Freeze value for specification compliance.
- (c) Alumina does not apply to gravel.
- (d) Coarse aggregate testing in IM 368

#### 4127.03 FINE AGGREGATE.

**A.** Natural sand meeting the requirements of Table 4127.03-1. A gradation for wearing course mixture of no more than 50% retained between two consecutive standard sieves below the No. 4 sieve or gravel aggregate with 100% passing the 3/8 inch sieve meeting these requirements.

Table 4127.03-1: Fine Aggregate Quality (Flexible Paving Mixtures)

Fine Aggregate Quality	Type A Maximum %	Type B Maximum %	Test Method
Organic Matter	0.01	0.01	Iowa DOT Materials Laboratory Test

			Method No. 215
Clay Lumps/Friable Particles <mark>(FA) <sup>(a)</sup></mark>	1.5	3.0	Materials I.M. 368
Shale	2.0	5.0	Materials I.M. 344
Use Method A for initial test. If Method A fails, Method B may be used a) Fine Aggregate testing per IM 368			

Reason for Revision IM 368 did not contain language for fine aggregate testing for "clay lumps ..." It has now been revised to include fine aggregate.

New Bid Item Required (X one)	Yes	No x
Bid Item Modification Required (X one)	Yes	No x
Bid Item Obsoletion Required (X one)	Yes	No x

### Comments:

**County or City Comments:** 

Industry Comments:..



### SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Geology Section	Bureau: Construction & Materials	Item 11	
Submittal Date: 9/18/2024	Proposed Effective Date: April 2025		
<b>Article No.:</b> 4131.03			
Title: Porous Backfill Material			

### **Specification Committee Action:**

Deferred: Not Approved: Approved Date: Effective Date:

### **Specification Committee Approved Text:**

### Comments:

### **Specification Section Recommended Text:**

4131.03, Quality.

### Replace the Article:

No visible clay lumps, friable particles, and clay coatings. Meet the requirements of Table 4131.03-1:

Table 4131.03-1: Aggregate Quality (Porous Backfill Material)

rable from the tragglogate quality (refere backing material)				
Aggregate Quality	Maximum Percent Allowed	Test Method		
Abrasion	50	AASHTO T 96		
Alumina <sup>(a, b)</sup>	0.7	Iowa DOT Materials Laboratory Test Method No. 222		
A Freeze	10	Iowa DOT Materials Laboratory Test Method No. 211, Method A		
Shale	5	Materials I.M. 345		
Clay Lumps and Friable Particles	2.0	Materials I.M. 368		

<sup>(</sup>a) If the Alumina value passes, the A-Freeze is not needed for specification compliance. If the Alumina value fails, determine the A Freeze value for specification compliance.

### Comments:

**Action: Delete** "No visible clay lumps, friable particles, and clay coatings" **Add** Specification limit for Clay Lumps and Friable Particles.

### Section 4131. Porous Backfill Material

### 4131.03 QUALITY.

Ne visible clay lumps, friable particles, and clay coatings. Meet the requirements of Table 4131.03-1.

### Table 4131.03-1: Aggregate Quality (Porous Backfill Material)

<sup>(</sup>b) Alumina does not apply to gravel.

Aggregate Quality	Maximum Percent Allowed	Test Method
Abrasion	50	AASHTO T 96
Alumina <sup>(a,b)</sup>	0.7	Iowa DOT Materials Laboratory Test Method No. 222
A Freeze	10	Office of Materials Test Method No. Iowa 211, Method A
Shale	5	Materials MI 345
Clay Lumps and Friable Particles	2.0	Materials I.M. 368

- (a) If the Alumina value passes the A-Freeze is not needed for specification compliance. If the Alumina value fails, determine the A-Freeze value for specification compliance.
- (b) Alumina does not apply to gravel.

**Reason for Revision** Set specification limits are preferred rather than language such as "no visible clay lumps ..."

New Bid Item Required (X one)	Yes	No x
Bid Item Modification Required (X one)	Yes	No x
Bid Item Obsoletion Required (X one)	Yes	No x

#### Comments:

**County or City Comments:** 

**Industry Comments:..** 

Carbon Content.



SPECIFICATION REVISION SUBMITTAL FORM					
Submitted by: Wes Musgrove / Geology Section		Bureau: Construction & Materials		Item 12	
Submittal Date: 9/18/2024		Proposed Effective Date: April 2025			
Article No.: 4	132.03				
Title: Special	Backfill Material				
Specification	Committee Action:				
Deferred:	Not Approved:	Approve	d Date:	Effective Date	e:
Specification	Committee Approve	d Text:		-	
Comments:					
Specification Section Recommended Text: 4132.03, Quality.  Delete the Article:  4132.03					
Comments:					
4132.03 QUA For gravel mixtu - A. Plastic	he Quality 4132.03	<del>wing:</del>	Special Backfill Mate		<del>109.</del>

**Reason for Revision** Both the plasticity index and carbon content tests are for soils especially not for sand or gravel. These tests have not been run for Special Backfill Material for a very long time. This is more "house-keeping" making the spec consistent with the way this material has been and is being

tested There is no testing for other aggregates and is certainly not necessary for sand and gravel.

Not to exceed 1.0%. Test according to lowa DOT Materials Laboratory Test Method No. 111.

New Bid Item Required (X one)	Yes	No x
Bid Item Modification Required (X one)	Yes	No x

Bid Item Obsoletion Required (X one)	Yes	No x		
Comments:				
County or City Comments:				
Industry Comments:				