

MINUTES OF IOWA DOT SPECIFICATION COMMITTEE MEETING

May 13, 2021

Members Present: Darwin Bishop District 3 - Construction

Roger Boulet District 6 - Materials

Mark Dunn Contracts & Specifications Bureau

Daniel Harness Design Bureau

Eric Johnsen, Secretary Contracts & Specifications Bureau Wes Musgrove Construction & Materials Bureau

Scott Nixon District 1 - Construction

Mike Nop Bridges & Structures Bureau

Tom Reis, Chair Contracts & Specifications Bureau

Members Not Present: Donna Buchwald Local Systems Bureau

Charlie Purcell Project Delivery Division
Willy Sorensen Traffic & Safety Bureau

Advisory Members Present: Paul Lafleur FHWA

Kaleb Wohlgemuth FHWA

Jeff DeVries Construction & Materials Bureau Kyle Frame Construction & Materials Bureau

Christy Vanbuskirk Local Systems Bureau

The Specification Committee met on Thursday, May 13, 2021, at 9:00 a.m. Tom Reis, Specifications Engineer, opened the meeting. The items were discussed in accordance with the agenda dated May 3, 2021:

The minutes are as follows:

1. Article 1109.13, A, National Emergency Provisions.

The Specifications Section requested to align the Standard Specifications regarding national emergencies with Iowa Code in response to the pandemic.

2. Section 2102, Roadway and Borrow Excavation.

The Construction and Materials Bureau requested to update roadway and borrow excavation specifications to match current practice.

3. Section 2108, Overhaul and other articles that reference overhaul.

The Construction and Materials Bureau requested to remove overhaul from the Standard Specifications.

4. Section 2122, Paved Shoulders.

Section 2123, Earth Shoulders for Pavements and Bases.

The Construction and Materials Bureau requested to update specifications to match current practice and clarify use of earth shoulder construction versus earth shoulder finishing.

5. Section 2402, Granular Working Blanket.

The Construction and Materials Bureau requested to add granular working blanket specifications to Section 2402.

6. Article 2408.02, L, 1, General (Bolt Holes).

The Construction and Materials Bureau requested to update specifications to match AASHTO guidance allowing plasma cut holes in secondary members.

7. Article 2408.03, S, 5, a, 6, Installing High Strength Fasteners.

The Construction and Materials Bureau requested to update specifications to match ASTM for minimum bolt tension.

8. Article 2413.03, H, 12, Limitations of Operations.

The Construction and Materials Bureau requested to provide temperature guidance to restrict overlays from being placed during time periods where they may be exposed to near freezing temperatures during critical curing time without the Engineer's written approval.

9. Article 2505.03, A, 3, Posts.

The Design Bureau requested to clarify use of prebored holes for guardrail posts.

10. Article 2528.01, A, General (Traffic Control).

Article 4188.01, General Requirements (Traffic Control Devices).

The Design Bureau requested to update requirements for work zone traffic control devices to comply with MASH-16 and set sunset dates for use of NCHRP 350 compliant devices.

11. Article 2551.03, B, 4, Crash Cushions.

The Design Bureau requested to clarify that if a temporary crash cushion is to be left in place, the Contractor is to furnish a permanent crash cushion.

12. Article 2553.02, Materials (Trenchless Construction).

The Construction and Materials Bureau requested to allow casing pipe meeting an API standard as an alternative to pipe meeting ASTM standards.

13. Article 2601.03, E, 2, a, Straw Mulch.

The Construction and Materials Bureau requested to require a tackifier when straw mulch is placed on frozen ground.

14. Section 2602, Water Pollution Control (Soil Erosion).

The Construction and Materials Bureau requested to update water pollution control specifications.



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Tom Reis / Eric Johnsen	Office: Specifications	Item 1
Submittal Date: 3/31/2021	Proposed Effective Date: Oct.	2021
Article No.: 1109.13, A	Other:	
Title: National Emergency Provisions		

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 5/13/2021 Effective Date: 10/19/2021

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

1109.13, A.

Replace the Article:

The Contracting Authority may, by written notice, with the approval of the FHWA where applicable, terminate the contract or a portion thereof when the Contractor is prevented from proceeding, directly or indirectly, with the construction contract as a direct result of an Executive Order of the President with respect to the prosecution of war or in the interest of national defense, as provided in lowa Code 573A. work or construction upon a public improvement is stopped directly or indirectly by or as the result of an order or action of any federal or state authority or of any court because of the occurrence or existence of a situation which the President, Congress of the United States, Governor, or lowa Legislature has declared to be a national or state emergency, and the circumstances or conditions are such that it is and will be impracticable to proceed with such work or construction, then the Contractor may, by written agreement terminate the contract. Such an agreement shall include terms and conditions of the termination of the contract and provisions for payment, if any, which any party shall pay to the other.

Comments:

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

Reason for Revision: To more closely align this Article with Iowa Code 573A following a review of our specifications related to national emergencies due to the pandemic of the past year.

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 / Melissa Serio	Office: Construction & Materials	Item 2	
Submittal Date: 4/26/21	Proposed Effective Date: October 2021 GS		
Section No.: 2102	Other:		
Title: Roadway and Borrow Excavation			

Specification Committee Action: Approved with changes.

Deferred: Not Approved: Approved Date: 5/13/2021 | Effective Date: 10/19/2021

Specification Committee Approved Text:

2102.03, D, Removal of Unsuitable or Unstable Soil and Placement of Backfill Material.

Rename and replace the Article:

Removal of Unsuitable or Unstable Soil and Placement of Selected or Special Backfill Material.

- **1.** Removal of unsuitable or unstable soil or placement of selected or special backfill material, or both, may be required in the contract documents or by the Engineer.
- 2. If the finished grade line leaves a subgrade of unsuitable or unstable soil, the Engineer may require the Contractor to remove that soil as below grade excavation and place backfill material to the finished grade line. Material encountered above the elevation of finished subgrade which cannot be properly consolidated in the embankment may be designated as unstable soil by the Engineer. If the surface on which the plans indicate that selected or special backfill material is to be placed is such that it will be seriously distorted by hauling equipment, the Engineer may designate this material as unstable.
- **3.** Remove unsuitable or unstable soil and place selected or special backfill material according to the following requirements:
 - a. Removal of Unsuitable or Unstable Soil.
 - 1) Remove these soils to the elevation shown in the contracts documents or as directed by the Engineer. Remove and place them as directed in the contract documents or by the Engineer and, in the case of unsuitable soils, according to Article 2107.03. N.
 - 2) Conduct operations so that the Engineer is given the opportunity to take cross sectional measurements required before the backfill material is placed.

b. Backfill Materials.

- 1) Obtain selected or other backfill materials from locations shown in the contract documents or as directed by the Engineer.
- 2) Furnish special backfill material that meets the requirements of Article 2102.02, F. Place salvaged materials used as special backfill material in uniform lifts no more than 6 inches thick. Place salvaged composite material used as special backfill material in uniform lifts of no more than 6 inches thick.

c. Placement of Backfill Material.

1) Place special or selected backfill material in areas shown in the contract documents or as directed by the Engineer. Place and compact as provided in Section 2107 with the following modifications:

- a) Where compaction with moisture and density control or with moisture control is required, ensure the moisture content of special backfill material is within the limits specified.
- **b)** When select backfill material is placed for subgrade treatment purposes, compact using moisture control.
- 2) Ensure the moisture content of backfill material is uniform. If necessary, adjust by processing in an approved pugmill or by adding water and road mixing in place prior to spreading and compacting.
 - a) Use selected backfill material that at the time of spreading and compacting is no drier than 2.5% below the optimum moisture shown in the contract documents. If not shown, the Engineer will determine the optimum moisture.
 - b) Use special backfill material that at the time of spreading and rolling is no drier than 2% below, and does not exceed, the maximum amount that will permit obtaining required compaction without rutting.
- When 2 feet or more of selected or special backfill material is placed in areas where unstable soils have been excavated, the condition of the underlying soil may limit the amount of compaction to be done in the bottom 1 foot of subgrade treatment. In exceptionally wet or unstable areas, the Contractor may be permitted to end dump the first 1 foot of treatment material and doze it into position with only partial compaction, as directed by the Engineer. Compact the material above the bottom 1 foot as provided above.
- 4) When less than 2 feet of selected or special backfill material is placed in areas of exceptionally wet or unstable soils, the Engineer may require a tamping type roller to be used for compaction of the material placed in the first foot of thickness.

2102.04, A, 1, a.

Replace the second bullet:

Borrow pits areas provided by the Contracting Authority,

2102.04, A, 1, c.

Replace the Article:

Payment will be made for the quantity of all Class 10 excavation items shown in the contract documents, adjusted by any increase or decrease in excavation from a borrow furnished by the Contracting Authority borrow excavation or change in backslope. Should the Contractor or the Engineer desire actual measurement, such as when a discrepancy in quantity is discovered, timely written notice shall be given to the other party at any time during the construction period. WhenIf actual measurement is requested, the preliminary cross sections and the balance points shown in the contract documents or cross sections based on actual measurements of the project area will be used. This method shall be used in conjunction with the quantities shown in the contract documents related to work as provided for in Articles 2107.04 and 2108.04.

2102.04, A, 1, d.

Replace the Article:

Payment will be made for the quantity of embankment-in-place shown in the contract documents, except as provided by this article. When embankment-in-place is specified, the Engineer will determine the quantity of materials placed using cross section and end area methods. Should the Contractor or the Engineer desire actual measurement, such as when a discrepancy in quantity is discovered, timely written notice shall be given at any time during the construction period. When actual measurement is requested, the preliminary cross sections or cross sections based on actual measurements of the project area will be used. The quantity for which payment is made will not exceed that necessary to construct the embankment to the neat cross section shown in the contract documents, adjusted for settlement. The Engineer

may elect to measure the embankment after selected backfill subgrade treatment material and topsoil have been spread and deduct the computed quantities of selected backfill material and topsoils this material from the quantities of total embankment. Shrinkage will not be included in the quantity.

2102.05, A, 1, c.

Add the Article:

- 3) Backfill.
 - a) Special Backfill: Per Article 2102.05, A, 4.
 - b) Class 10, Excavation: Per the following:
 - When Waste is bid separately, any increase in Roadway and Borrow quantity will be paid per cubic yard. Waste quantity will be decreased by the same quantity.
 - When Waste is not bid separately, there will be no increase or decrease to Roadway and Borrow quantity for the backfill. Payment for the backfill will be made for the cut volume that is included in the Roadway and Borrow quantity.
 - c) Contractor Furnished Embankment-in-Place: Increase in quantity will be paid per cubic yard. Shrinkage will not be included in the quantity.

2102.05, A, 1, d.

Replace the Article:

d. Excavation involved in rebuilding embankments in accordance with Section 2107: by class of excavation involved.

Comments: District 3 questioned using "soil backfill" in Article 2102.03, D, 3, b, 1, when all other references to backfill are now generic. A granular material could be used for backfill. "Soil" was removed.

Construction and Materials requested to revised the first bullet of Article 2102.05, A, 1, c, 3, b. "Any" was added to clarify an increase in Roadway and Borrow quantity.

Specification Section Recommended Text:

2102.03, D, Removal of Unsuitable or Unstable Soil and Placement of Backfill Material.

Rename and **replace** the Article:

Removal of Unsuitable or Unstable Soil and Placement of Selected or Special Backfill Material.

- 1. Removal of unsuitable or unstable soil or placement of selected or special backfill material, or both, may be required in the contract documents or by the Engineer.
- 2. If the finished grade line leaves a subgrade of unsuitable or unstable soil, the Engineer may require the Contractor to remove that soil as below grade excavation and place backfill material to the finished grade line. Material encountered above the elevation of finished subgrade which cannot be properly consolidated in the embankment may be designated as unstable soil by the Engineer. If the surface on which the plans indicate that selected or special backfill material is to be placed is such that it will be seriously distorted by hauling equipment, the Engineer may designate this material as unstable.
- **3.** Remove unsuitable or unstable soil and place selected or special backfill material according to the following requirements:
 - a. Removal of Unsuitable or Unstable Soil.
 - 1) Remove these soils to the elevation shown in the contracts documents or as directed by the Engineer. Remove and place them as directed in the contract

- documents or by the Engineer and, in the case of unsuitable soils, according to Article 2107.03. N.
- 2) Conduct operations so that the Engineer is given the opportunity to take cross sectional measurements required before the backfill material is placed.

b. Backfill Materials.

- 1) Obtain selected or other soil backfill materials from locations shown in the contract documents or as directed by the Engineer.
- 2) Furnish special backfill material that meets the requirements of Article 2102.02, F. Place salvaged materials used as special backfill material in uniform lifts no more than 6 inches thick. Place salvaged composite material used as special backfill material in uniform lifts of no more than 6 inches thick.

c. Placement of Backfill Material.

- 1) Place special or selected backfill material in areas shown in the contract documents or as directed by the Engineer. Place and compact as provided in Section 2107 with the following modifications:
 - a) Where compaction with moisture and density control or with moisture control is required, ensure the moisture content of special backfill material is within the limits specified.
 - **b)** When select backfill material is placed for subgrade treatment purposes, compact using moisture control.
- 2) Ensure the moisture content of backfill material is uniform. If necessary, adjust by processing in an approved pugmill or by adding water and road mixing in place prior to spreading and compacting.
 - a) Use selected backfill material that at the time of spreading and compacting is no drier than 2.5% below the optimum moisture shown in the contract documents. If not shown, the Engineer will determine the optimum moisture.
 - b) Use special backfill material that at the time of spreading and rolling is no drier than 2% below, and does not exceed, the maximum amount that will permit obtaining required compaction without rutting.
- When 2 feet or more of selected or special backfill material is placed in areas where unstable soils have been excavated, the condition of the underlying soil may limit the amount of compaction to be done in the bottom 1 foot of subgrade treatment. In exceptionally wet or unstable areas, the Contractor may be permitted to end dump the first 1 foot of treatment material and doze it into position with only partial compaction, as directed by the Engineer. Compact the material above the bottom 1 foot as provided above.
- 4) When less than 2 feet of selected or special backfill material is placed in areas of exceptionally wet or unstable soils, the Engineer may require a tamping type roller to be used for compaction of the material placed in the first foot of thickness.

2102.04, A, 1, a.

Replace the second bullet:

Borrow pits areas provided by the Contracting Authority,

2102.04, A, 1, c.

Replace the Article:

Payment will be made for the quantity of all Class 10 excavation items shown in the contract documents, adjusted by any increase or decrease in excavation from a borrow furnished by the Contracting Authority borrow excavation or change in backslope. Should the Contractor or the Engineer desire actual measurement, such as when a discrepancy in quantity is discovered, timely written notice shall be given to the other party at any time during the construction period. WhenIf actual measurement is requested, the preliminary cross sections and the balance points shown in the contract documents or cross sections based on actual measurements of the project area will be used. This method shall be used in conjunction with the quantities

shown in the contract documents related to work as provided for in Articles 2107.04 and 2108.04.

2102.04, A, 1, d.

Replace the Article:

Payment will be made for the quantity of embankment-in-place shown in the contract documents, except as provided by this article. When embankment-in-place is specified, the Engineer will determine the quantity of materials placed using cross section and end area methods. Should the Contractor or the Engineer desire actual measurement, such as when a discrepancy in quantity is discovered, timely written notice shall be given at any time during the construction period. When actual measurement is requested, the preliminary cross sections or cross sections based on actual measurements of the project area will be used. The quantity for which payment is made will not exceed that necessary to construct the embankment to the neat cross section shown in the contract documents, adjusted for settlement. The Engineer may elect to measure the embankment after selected backfill subgrade treatment material and topsoil have been spread and deduct the computed quantities of selected backfill material and topsoils this material from the quantities of total embankment. Shrinkage will not be included in the quantity.

2102.05, A, 1, c.

Add the Article:

- 3) Backfill.
 - d) Special Backfill: Per Article 2102.05, A, 4.
 - e) Class 10, Excavation: Per the following:
 - When Waste is bid separately, the increase in Roadway and Borrow quantity will be paid per cubic yard. Waste quantity will be decreased by the same quantity.
 - When Waste is not bid separately, there will be no increase or decrease to Roadway and Borrow quantity for the backfill. Payment for the backfill will be made for the cut volume that is included in the Roadway and Borrow quantity.
 - f) Contractor Furnished Embankment-in-Place: Increase in quantity will be paid per cubic yard. Shrinkage will not be included in the quantity.

2102.05, A, 1, d.

Replace the Article:

d. Excavation involved in rebuilding embankments in accordance with Section 2107: by class of excavation involved.

Comments:

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

2102.03, D.

Replace the Articles:

- D. Removal of Unsuitable or Unstable Soil and Placement of Selected or Special Backfill Material.
 - 1. Removal of unsuitable or unstable soil or placement of selected or special backfill material, or both, may be required in the contract documents or by the Engineer.
 - 2. If the finished grade line leaves a subgrade of unsuitable or unstable soil, the Engineer may require the Contractor to remove that soil as below grade excavation and place backfill material to the finished grade line. Material encountered above the elevation of finished subgrade which cannot be

properly consolidated in the embankment may be designated as unstable soil by the Engineer. If the surface on which the plans indicate that selected or special backfill material is to be placed is such that it will be seriously distorted by hauling equipment, the Engineer may designate this material as unstable.

- **3.** Remove unsuitable or unstable soil and place selected or special backfill material according to the following requirements:
 - a. Removal of Unsuitable or Unstable Soil.
 - Remove these soils to the elevation shown in the contracts documents or as directed by the Engineer. Remove and place them as directed in the contract documents or by the Engineer and, in the case of unsuitable soils, according to Article 2107.03, N.
 - Conduct operations so that the Engineer is given the opportunity to take cross sectional measurements required before the backfill material is placed.

b. Backfill Materials.

- Obtain selected or other soil backfill materials from locations shown in the contract documents or as directed by the Engineer.
- 2) Furnish special backfill material that meets the requirements of Article 2102.02, F. Place salvaged materials used as special backfill material in uniform lifts no more than 6 inches thick. Place salvaged composite material used as special backfill material in uniform lifts of no more than 6 inches thick.

c. Placement of Backfill Material.

- 1) Place special or selected backfill material in areas shown in the contract documents or as directed by the Engineer. Place and compact as provided in Section 2107 with the following modifications:
 - a) Where compaction with moisture and density control or with moisture control is required, ensure the moisture content of special backfill material is within the limits specified.
 - b) When select backfill material is placed for subgrade treatment purposes, compact using moisture control.
- 2) Ensure the moisture content of backfill material is uniform. If necessary, adjust by processing in an approved pugmill or by adding water and road mixing in place prior to spreading and compacting.
 - a) Use selected backfill material that at the time of spreading and compacting is no drier than 2.5% below the optimum moisture shown in the contract documents. If not shown, the Engineer will determine the optimum moisture.
 - b) Use special backfill material that at the time of spreading and rolling is no drier than 2% below, and does not exceed, the maximum amount that will permit obtaining required compaction without rutting.
- When 2 feet or more of selected or special backfill material is placed in areas where unstable soils have been excavated, the condition of the underlying soil may limit the amount of compaction to be done in the bottom 1 foot of subgrade treatment. In exceptionally wet or unstable areas, the Contractor may be permitted to end dump the first 1 foot of treatment material and doze it into position with only partial compaction, as directed by the Engineer. Compact the material above the bottom 1 foot as provided above.
- 4) When less than 2 feet of selected or special backfill material is placed in areas of exceptionally wet or unstable soils, the Engineer may require a tamping type roller to be used for compaction of the material placed in the first foot of thickness.

2102.04, A, 1, a.

Replace the second bullet in the Article:

Borrow pits areas provided by the Contracting Authority,

2102.04, A, 1, c.

Replace the Article:

c. Payment will be made for the quantity of all Class 10 excavation items shown in the contract documents, adjusted by any increase or decrease in excavation from a borrow furnished by the Contracting Authority borrow excavation or change in backslope. Should the Contractor or the Engineer desire actual measurement, such as when a discrepancy in quantity is discovered, timely written notice shall be given to the other party at any time during the construction period. WhenIf actual measurement is requested, the preliminary cross sections and the balance points shown in the contract documents or cross sections based on actual measurements of the project

area will be used. This method shall be used in conjunction with the quantities shown in the contract documents related to work as provided for in Articles 2107.04 and 2108.04.

2102.04, A, 1, d. Replace the Article:

d. Payment will be made for the quantity of embankment-in-place shown in the contract documents, except as provided by this article. When embankment-in-place is specified, the Engineer will determine the quantity of materials placed using cross section and end area methods. Should the Contractor or the Engineer desire actual measurement, such as when a discrepancy in quantity is discovered, timely written notice shall be given at any time during the construction period. When actual measurement is requested, the preliminary cross sections or cross sections based on actual measurements of the project area will be used. The quantity for which payment is made will not exceed that necessary to construct the embankment to the neat cross section shown in the contract documents, adjusted for settlement. The Engineer may elect to measure the embankment after selected backfill subgrade treatment material and topsoil have been spread and deduct the computed quantities of selected backfill material and topsoils this material from the quantities of total embankment. Shrinkage will not be included in the quantity.

2102.05, A, 1, c. 3) Add the Article:

- 3) Backfill:
 - Special Backfill: Per Article 2102.05, A, 4.
 - Class 10, Excavation:
 - When Waste is bid separately:
 - The increase in Roadway and Borrow quantity will be paid per cubic yard. Waste quantity will be decreased by the same quantity.
 - When Waste is not bid separately:
 - There will be no increase or decrease to Roadway and Borrow quantity for the backfill. Payment for the backfill will be made for the cut volume that is included in the Roadway and Borrow quantity.
 - Contractor Furnished Embankment-in-Place: Increase in quantity will be paid per cubic yard. Shrinkage will not be included in the quantity.

2102.05, A, 1, d. Replace the Article:

d. Excavation involved in rebuilding embankments in accordance with Section 2107: by class of excavation involved.

Reason for Revision:

- Clean-up language related to removal of unsuitable/unstable material and placement of backfill material to match current practices.
- Clean-up language regarding MOM of Cl. 10 excavation and EIP to match current practices.
- Add language dealing with backfill of over-excavated areas to provide for different earthwork scenarios.
- Provide clarification for excavation in rebuilding embankments to make reference to specification section that provide requirements.

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: None

County or City Comments:

Industry Comments: Discussed at 3/23/21 DOT/AGC/Grading Contractor meeting. Provided opportunity for industry to submit comments. Meeting minutes with revised proposed revisions

provided to industry.



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Melissa Serio	Office: Construction & Materials	Item 3
Submittal Date: 4/26/21	Proposed Effective Date: Octobe	r 2021 GS
Section No.: 2108 and other articles that reference overhaul Title: Overhaul	Other: Other sections that referen 1106, 2102, 2105, 2123, 2126, 2132 2602	

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 5/13/2021 | Effective Date: 10/19/2021

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

2108, Overhaul.

Delete the Section:

Section 2108. Overhaul

2108.01 DESCRIPTION.

Transport excavated material from roadway and borrow excavation, from channel excavation, and from excavation for structures a distance in excess of the free haul limit for the kind of excavation involved.

2108.02 MATERIALS.

Specified in the contract documents.

2108.03 CONSTRUCTION.

None.

2108.04 METHOD OF MEASUREMENT.

- A. In determining what constitutes necessary haul, it will be assumed that material taken from excavation will be deposited in embankment after having been hauled the minimum possible distance. The haul distance for material moved from borrow outside the roadway will be measured from the center of mass along the shortest route the Engineer determines to be feasible and satisfactory. The haul distance for material obtained from the roadway, including interchanges and intersections, and placed inside the main roadway will be measured along the center line of the roadway.
- B. If pavement equipment crossings are designated by the Contractor as provided in Article 1105.11, B, and the contract provides for payment of overhaul on the material involved, overhaul on the material obtained within the roadway will be computed and measured along the center line as described above. Overhaul will be computed and measured on the basis that material taken from excavation was deposited in adjacent embankment after having been hauled the minimum possible distance, irrespective of the number and location of equipment crossings designated by the Contractor. The haul distance for material moved from outside the roadway will be measured along the shortest route the Engineer determines feasible and

satisfactory. It will be assumed that an equipment crossing was designated opposite the point where the haul road enters the roadway.

- C. The limits of free haul will be determined from a mass diagram by fixing two points on the volume curve, one on each side of the neutral grade point. One point is placed in excavation and the other in embankment so that the distance between them equals the free haul distance and the included quantity of excavation and embankment balance. Materials within the free haul limit will be eliminated from further consideration. The distance between the center of gravity of the remaining mass of excavation and the remaining mass of embankment, minus the free haul distance, will be the overhaul distance. The quantity of overhaul will be measured in station yards. A station yard is defined as the product of an overhaul distance of 1 station multiplied by 1 cubic yard of material hauled a distance greater than the free haul distance.
- D. Unless provided otherwise in the contract documents, the free haul distance will be 1000 feet.
- **E.** Payment for Overhaul will be for quantities shown in the contract documents in conjunction with quantities shown in the contract documents described in Article 2102.04 and under the conditions described therein. If Class 10 excavation quantities are changed, overhaul quantities will also be subject to change. The Engineer will compute the overhaul change if it can be identified. If not, it will be adjusted by the ratio of adjusted quantities to original quantities shown in the contract documents of Class 10 excavation.

2108.05 BASIS OF PAYMENT.

Payment for the quantity of overhaul, measured as provided above, will be the contract unit price per station yard with the following exceptions:

- A. Overhaul will not be paid for selected backfill material if it can be secured and used as shown in the contract documents. Should changes from the contract documents cause an increase or decrease in necessary haul, payment will be adjusted for such increase or decrease at the contract unit price per station yard.
- **B.** If no bid price appears in the contract for overhaul, increased overhaul will be paid for at a unit price agreed to by the Contractor and Engineer, but not to exceed \$0.02 per station yard.
- C. Overhaul will not be paid for Contractor furnished material (such as borrow or topsoil) and waste material.

1106.07, C.

Delete the first sentence:

No payment for overhaul will be allowed for material hauled to or from these sites.

2102.04, A, 1 Excavation.

Delete Article e and **renumber** Article f:

- e. Overhaul will not be measured or paid for when excavation is paid for as embankment-inplace. Prior to computation of embankment quantities, the original ground profile and original ground elevations shown on the cross sections will be adjusted to conform as nearly as practical to information obtained from taking elevations on settlement plates.
- **f e.** Measurement for boulders or rock fragments classified as Class 12 excavation will be as follows:

2105.05, C.

Delete the Article:

C. Overhaul will not be paid for this item.

2123.04, A, 1, c.

Delete the Article:

c. Unless provided otherwise in the contract documents, overhaul will be measured according to Article 2108.04.

2123.05, A, 1, a, 3.

Delete the Article:

3) Overhaul: per station yard, unless the contract provides otherwise.

2126.05. B.

Delete the second sentence:

No overhaul will be paid on this material.

2132.04, C, 3.

Delete the Article:

3. When removal and transportation of stripping involves a haul of more than 1000 feet, overhaul will be computed and paid according to Section 2108.

2132.05, C, 2.

Replace the Article:

If the contract provides a separate contract unit price for stripping, payment will be for the cubic yards of excavation and the number of station-yards of overhaul, computed as specified above.

2302.03, G, 2.

Delete the second sentence:

No overhaul will be allowed.

2402.05, D, Overhaul.

Delete the Article and renumber following Articles:

D. Overhaul.

- Material from classes of excavation other than Class 24 will ordinarily be deposited within 200 feet from the point of excavation as directed by the Engineer. Payment for overhaul beyond the free haul limit of 200 feet will be as provided in Article 1109.03, B.
- 2. Payment for overhaul on Class 24 excavation will be as provided in Section 2108, except the free haul limit will be 500 feet.
- **■** D. Unexpected Rock Excavation.
- F E. Foundation Treatment Material.
- G F. Granular Backfill.
- **H** G. Compaction with Moisture Control (Structures).
- I H. Flowable Mortar.

JI. Flooded Backfill.

2602.05, A, 7, Removal of Silt Basins.

Delete the last sentence:

Overhaul will not be paid for this item.

Comments:

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

Delete entire Specification Section 2108:

Section 2108. Overhaul

2108.01 DESCRIPTION.

Transport excavated material from roadway and borrow excavation, from channel excavation, and from excavation for structures a distance in excess of the free haul limit for the kind of excavation involved.

2108.02 **MATERIALS**.

Specified in the contract documents.

2108.03 CONSTRUCTION.

None.

2108.04 METHOD OF MEASUREMENT.

- A. In determining what constitutes necessary haul, it will be assumed that material taken from excavation will be deposited in embankment after having been hauled the minimum possible distance. The haul distance for material moved from borrow outside the roadway will be measured from the center of mass along the shortest route the Engineer determines to be feasible and satisfactory. The haul distance for material obtained from the roadway, including interchanges and intersections, and placed inside the main roadway will be measured along the center line of the roadway.
- B. If pavement equipment crossings are designated by the Contractor as provided in Article 1105.11, B, and the contract provides for payment of overhaul on the material involved, overhaul on the material obtained within the roadway will be computed and measured along the center line as described above. Overhaul will be computed and measured on the basis that material taken from excavation was deposited in adjacent embankment after having been hauled the minimum possible distance, irrespective of the number and location of equipment crossings designated by the Contractor. The haul distance for material moved from outside the roadway will be measured along the shortest route the Engineer determines feasible and satisfactory. It will be assumed that an equipment crossing was designated opposite the point where the haul road enters the roadway.
- C. The limits of free haul will be determined from a mass diagram by fixing two points on the volume curve, one on each side of the neutral grade point. One point is placed in excavation and the other in embankment so that the distance between them equals the free haul distance and the included quantity of excavation and embankment balance. Materials within the free haul limit will be eliminated from further consideration. The distance between the center of gravity of the remaining mass of excavation and the remaining mass of embankment, minus the free haul distance, will be the overhaul distance. The quantity of overhaul will be measured in station yards. A station yard is defined as the product of an overhaul distance of 1 station multiplied by 1 cubic yard of material hauled a distance greater than the free haul distance.
- D. Unless provided otherwise in the contract documents, the free haul distance will be 1000 feet.
- E. Payment for Overhaul will be for quantities shown in the contract documents in conjunction with quantities shown in the contract documents described in Article 2102.04 and under the conditions described therein. If Class 10 excavation quantities are changed, overhaul quantities will also be subject to change. The

Engineer will compute the overhaul change if it can be identified. If not, it will be adjusted by the ratio of adjusted quantities to original quantities shown in the contract documents of Class 10 excavation.

2108.05 BASIS OF PAYMENT.

Payment for the quantity of overhaul, measured as provided above, will be the contract unit price per station yard with the following exceptions:

- A. Overhaul will not be paid for selected backfill material if it can be secured and used as shown in the contract documents. Should changes from the contract documents cause an increase or decrease in necessary haul, payment will be adjusted for such increase or decrease at the contract unit price per station yard.
- B. If no bid price appears in the contract for overhaul, increased overhaul will be paid for at a unit price agreed to by the Contractor and Engineer, but not to exceed \$0.02 per station yard.
- C. Overhaul will not be paid for Contractor furnished material (such as borrow or topsoil) and waste material.

1106.07. C.

Replace the Article:

C. No payment for overhaul will be allowed for material hauled to or from these sites. Excess material shall not be placed within the right-of-way unless specifically stated on the plans.

2102.04, A, 1, e. and f.

Delete the Article e. and re-number Article f .:

- e. Overhaul will not be measured or paid for when excavation is paid for as embankment-in-place. Prior to computation of embankment quantities, the original ground profile and original ground elevations shown on the cross sections will be adjusted to conform as nearly as practical to information obtained from taking elevations on settlement plates.
- f. Measurement for boulders or rock fragments classified as Class 12 excavation will be as follows:

2105.05, C.

Delete the Article:

C. Overhaul will not be paid for this item.

2123.04. A. 1. c.

Delete the Article:

c. Unless provided otherwise in the contract documents, overhaul will be measured according to Article 2108.04.

2123.05, A, 1, a. 3)

Delete the Article:

3) Overhaul: per station yard, unless the contract provides otherwise.

2126.05. B.

Replace the Article:

B. Payment is full compensation for reclaiming present surfacing material, scarifying, blading, loading, hauling, stockpiling, and spreading the reclaimed material as directed by the Engineer. No overhaul will be paid on this material.

2132.04, C, 3.

Delete the Article:

When removal and transportation of stripping involves a haul of more than 1000 feet, overhaul will be computed and paid according to Section 2108.

2132.05. C. 2.

Replace the Article:

2. If the contract provides a separate contract unit price for stripping, payment will be for the cubic yards of excavation and the number of station-yards of overhaul, computed as specified above.

2302.03, G, 2.

Delete last sentence in the Article:

2. Deposit materials removed from curbs and flumes and designated for salvage in areas as designated in the contract documents. No overhaul will be allowed.

2402.05, D.

Delete the Article and renumber following Articles:

D. Overhaul.

- Material from classes of excavation other than Class 24 will ordinarily be deposited within 200 feet from the point of excavation as directed by the Engineer. Payment for overhaul beyond the free haul limit of 200 feet will be as provided in Article 1109.03, B.
- Payment for overhaul on Class 24 excavation will be as provided in <u>Section 2108</u>, except the free haul limit will be 500 feet.

2602.05. A. 7.

Delete last sentence in the Article:

7. Removal of Silt Basins.

Each. Payment is full compensation for providing, preparing, transporting, and placing Class 10 material and topsoil. Contractor has the option, at no additional cost to the Contracting Authority, of stripping and stockpiling Class 10 material and topsoil from constructing silt basins for later use in silt basin removal. Overhaul will not be paid for this item.

Reason for Revision: Due to change in practices, delete use of Overhaul. DOT last used item in 2013. Local public agency last used item in 2016.

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 x	No

Comments: Make "Overhaul" item obsolete.

County or City Comments:

Industry Comments: Discussed at 3/23/21 DOT/AGC/Grading Contractor meeting. Provided opportunity for industry to submit comments. Meeting minutes with revised proposed revisions provided to industry.



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Melissa Serio	Office: Construction & Materials	Item 4
Submittal Date: 4/26/21	Proposed Effective Date: October 2021 GS	
Section No.: 2122	Other:	
Title: Paved Shoulders		
Section No.: 2123		
Title: Earth Shoulders for Pavements and Bases		

Specification Committee Action: Approved with changes.

Deferred: Not Approved: Approved Date: 5/13/2021 Effective Date: 10/19/2021

Specification Committee Approved Text:

2122.01, A.

Replace the last sentence:

This work may include construction of an earth fill and a special backfill material layer for new construction or surface preparation for resurfacing or overlay construction.

2122.03, B. Preparation of Shoulder Area.

Replace Articles 1 and 2:

- 1. This work may involve construction of an earth fill and a special backfill material to allow placement of paved shoulders. Spread and compact earth fill Prepare subgrade according to the requirements of Section 2109.
- 2. Use select materials of Article 2102.02, D, 1, if available and coordinated with the Engineer, or suitable soils of Article 2102.02, D, 2. Do not use unsuitable soils of Article 2102.02, D, 3, or topsoil. Place special backfill material according to Article 2102.03, D, 3, c.

2122.03, C, 3 Special Backfill Material.

Delete the Article:

3. Special Backfill Material.

Place special backfill material according to Article 2102.03, D, 3, c.

2122.03, D, Finishing.

Replace the last sentence:

Finish the foreslope according to Article 2123.03, C. Complete earth shoulder as shown in the contract documents and according to Section 2123.

2122.05, A, Paved Shoulders.

Replace Articles 2 and 3:

- 2. Portland Cement Concrete Paved Shoulder.
 - **a.** Article 2301.05, A, applies.

- **b.** Payment for paved shoulders constructed is full compensation for:
 - Preparing the area, including the earth fill, and furnishing and placing the paved shoulder, and finishing the shoulder edge and granular fillet (as required).
 - Furnishing all the material, equipment, tools, and labor to complete the work according the contract documents and this specification.

3. Separate payment will not be made for:

- Construction of the earth fill.
- Asphalt binder.
- Tack coat bitumen.
- Placement, construction, or sawing and filling of joints for the PCC base.
- Finishing of the shoulder edge and furnishing granular fillet material.

2123.01, A.

Add as the last sentence:

In general, earth shoulder finishing relates to earthwork adjacent to curb and gutter.

2123.02, A.

Replace the last sentence:

Place topsoil meeting requirements of Article 2105.02 and as required by Article 2105.03, B.

2123.03, B, Constructing Earth Shoulders.

Replace Article title:

B. Constructing Earth Shoulders Construction.

2123.03, B, 1, c.

Replace the Article:

- c. Placing material resulting from subgrade trimming operations (if available). and
- **d.** eCompleting construction with a minimum of 4 inches of topsoil.

2123.03. B. 2.

Add as the last sentence:

Topsoil shall be spread and smoothed.

2123.03, C, Finishing.

Replace Article title:

C. Earth Shoulder Finishing.

2123.03, C, 1.

Replace the Article:

After earth shoulders have been compacted and topsoil placed as required by contract documents, shape to the specified cross section and smooth to a condition acceptable to the Engineer.

2123.05, A, 1, a, 3.

Replace the Article:

Overhaul: per station yard, unless the contract provides otherwise. Topsoil: per cubic yard as provided in Article 2105.05.

2123.05, A, 2, b.

Replace the Article:

Payment is full compensation for all costs including the cost of excavating, hauling, providing material, placing, compacting, rebuilding approaches, and finishing work.

Comments: Construction and Materials corrected the reference in Article 2123.05, A, 1, a, 3 to read "Article 2105.05".

Specification Section Recommended Text:

2122.01, A.

Replace the last sentence:

This work may include construction of an earth fill and a special backfill material layer for new construction or surface preparation for resurfacing or overlay construction.

2122.03, B. Preparation of Shoulder Area.

Replace Articles 1 and 2:

- 1. This work may involve construction of an earth fill and a special backfill material to allow placement of paved shoulders. Spread and compact earth fill Prepare subgrade according to the requirements of Section 2109.
- 2. Use select materials of Article 2102.02, D, 1, if available and coordinated with the Engineer, or suitable soils of Article 2102.02, D, 2. Do not use unsuitable soils of Article 2102.02, D, 3, or topsoil. Place special backfill material according to Article 2102.03, D, 3, c.

2122.03, C, 3 Special Backfill Material.

Delete the Article:

3. Special Backfill Material.

Place special backfill material according to Article 2102.03, D, 3, c.

2122.03, D, Finishing.

Replace the last sentence:

Finish the foreslope according to Article 2123.03, C. Complete earth shoulder as shown in the contract documents and according to Section 2123.

2122.05, A, Paved Shoulders.

Replace Articles 2 and 3:

- 2. Portland Cement Concrete Paved Shoulder.
 - **a.** Article 2301.05, A, applies.
 - **b.** Payment for paved shoulders constructed is full compensation for:
 - Preparing the area, including the earth fill, and furnishing and placing the paved shoulder, and finishing the shoulder edge and granular fillet (as required).
 - Furnishing all the material, equipment, tools, and labor to complete the work according the contract documents and this specification.

3. Separate payment will not be made for:

- Construction of the earth fill.
- Asphalt binder.
- · Tack coat bitumen.
- Placement, construction, or sawing and filling of joints for the PCC base.
- Finishing of the shoulder edge and furnishing granular fillet material.

2123.01, A.

Add as the last sentence:

In general, earth shoulder finishing relates to earthwork adjacent to curb and gutter.

2123.02, A.

Replace the last sentence:

Place topsoil meeting requirements of Article 2105.02 and as required by Article 2105.03, B.

2123.03, B, Constructing Earth Shoulders.

Replace Article title:

B. Constructing Earth Shoulders Construction.

2123.03, B, 1, c.

Replace the Article:

- c. Placing material resulting from subgrade trimming operations (if available). and
- d. eCompleting construction with a minimum of 4 inches of topsoil.

2123.03, B, 2.

Add as the last sentence:

Topsoil shall be spread and smoothed.

2123.03, C, Finishing.

Replace Article title:

C. Earth Shoulder Finishing.

2123.03, C, 1.

Replace the Article:

After earth shoulders have been compacted and topsoil placed as required by contract documents, shape to the specified cross section and smooth to a condition acceptable to the Engineer.

2123.05, A, 1, a, 3.

Replace the Article:

Overhaul: per station yard, unless the contract provides otherwise. Topsoil: per cubic yard as provided in Article 2105.04.

2123.05, A, 2, b.

Replace the Article:

Payment is full compensation for all costs including the cost of excavating, hauling, providing material, placing, compacting, rebuilding approaches, and finishing work.

Comments:

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

2122.01. A.

Replace the last sentence:

This work may include construction of an earth fill and a special backfill material layer for new construction or surface preparation for resurfacing or overlay construction.

2122.03, B. Preparation of Shoulder Area.

Replace the Articles:

- This work may involve construction of an earth fill and a special backfill material to allow placement of paved shoulders. Spread and compact earth fill Prepare subgrade according to the requirements of Section 2109.
- 2. Use select materials of Article 2102.02, D, 1, if available and coordinated with the Engineer, or suitable soils of Article 2102.02, D, 2. Do not use unsuitable soils of Article 2102.02, D, 3, or topsoil. Place special backfill material according to Article 2102.03, D, 3, c.

2122.03, C, 3.

Delete the Article:

Special Backfill Material.

Place special backfill material according to Article 2102.03, D, 3, c.

2122.03, D.

Replace the last sentence:

Finish the foreslope according to Article 2123.03, C. Complete earth shoulder as shown in the contract documents and according to Section 2123.

2122.05, A, 2 & 3.

Replace the Articles:

- 2. Portland Cement Concrete Paved Shoulder.
 - a. Article 2301.05, A, applies.
 - b. Payment for paved shoulders constructed is full compensation for:
 - Preparing the area, including the earth fill, and furnishing and placing the paved shoulder, and finishing the shoulder edge and granular fillet (as required).
 - Furnishing all the material, equipment, tools, and labor to complete the work according the contract documents and this specification.

3. Separate payment will not be made for:

- Construction of the earth fill.
- Asphalt binder.
- Tack coat bitumen.
- Placement, construction, or sawing and filling of joints for the PCC base.
- Finishing of the shoulder edge and furnishing granular fillet material.

2123.01, A.

Add as the last sentence:

In general, earth shoulder finishing relates to earthwork adjacent to curb and gutter.

2123.02, A.

Revise the last sentence:

Place topsoil meeting requirements of Article 2105.02 and as required by Article 2105.03, B.

2123.03. B.

Replace Article title:

B. Constructing Earth Shoulders Construction.

2123.03, B, 1, c.

Replace the Article:

- c. Placing material resulting from subgrade trimming operations (if available). and
- d. eCompleting construction with a minimum of 4 inches of topsoil.

2123.03, B, 2.

Add as the last sentence:

Topsoil shall be spread and smoothed.

2123.03. C.

Replace Article title:

C. Earth Shoulder Finishing.

2123.03. C. 1.

Replace the Article:

1. After earth shoulders have been compacted and topsoil placed as required by contract documents, shape to the specified cross section and smooth to a condition acceptable to the Engineer.

2123.05, A:

Replace the Article:

- 1. Earth Shoulder Finishing.
 - a. Payment will be the contract unit price for the following:
 - 1) Earth Shoulder Finishing: per station.
 - 2) Excavation: per cubic yard, as provided in Article 2102.05, A, 1.
 - 3) Overhaul: per station yard, unless the contract provides otherwise.
 - 3) Topsoil: per cubic yard as provided in Article 2105.04.
 - **b.** Payments are full compensation for all work of building shoulders.
- 2. Earth Shoulder Construction.
 - **a.** Payment will be the contract unit price per station.
 - **b.** Payment is full compensation for all costs including the cost of excavating, hauling, providing material, placing, compacting, rebuilding approaches, and finishing work.

Reason for Revision: Make changes to 2122 so earth shoulder construction and finishing is no longer incidental to paved shoulders. This would change spec so it matches our current practice.

Changes to 2123:

- -Provide clarification on use of earth shoulder construction versus earth shoulder finishing.
- -Provide clarification to earth shoulder construction requirements, specifically related to topsoil placement, and earth shoulder finishing requirements.

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: None

County or City Comments:

Industry Comments: Discussed at 3/23/21 DOT/AGC/Grading Contractor meeting. Provided opportunity for industry to submit comments. Meeting minutes with revised proposed revisions provided to industry.



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Melissa Serio	Office: Construction & Materials	Item 5	
Submittal Date: 4/26/21	Proposed Effective Date: October 2021 GS		
Section No.: 2402	Other:		
Title: Granular Working Blanket			

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 5/13/2021 | Effective Date: 10/19/2021

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

2402.03, H, Placing Backfill Materials.

Add the Article:

14. Where a granular working blanket is specified, spread material meeting the requirements of Section 4118 unless another material is specified in the contract documents.

2402.04, Method of Measurement.

Add the Article:

J. Granular Working Blanket.

Cubic yards according to Article 2312.04, A.

2402.05, Basis of Payment.

Add the Article:

K. Granular Working Blanket.

Per cubic yard.

Comments:

2402.03, H.

Add the Article:

14. Where a granular working blanket is specified, spread material meeting the requirements of Section 4118 unless another material is specified in the contract documents.

2402.04, J.

Add the Article:

J. Granular Working Blanket.

Cubic yards according to Article 2312.04, A.

2402.05, K.

Add the Article:

K. Granular Working Blanket.

Per cubic yard.

Reason for Revision: Add language to 2402 section for a granular working blanket. Currently, 2107 item is used, which can be confusing for contractors and field staff due to typically requiring a different material when it's a working blanket for culverts instead of a working blanket for fill. MOM and BOP is based on 2107 MOM and BOP item.

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	No x

Comments: Create new 2402 item for Granular Working Blanket

County or City Comments:

Industry Comments: Request came from a contractor. Discussed at 3/23/21 DOT/AGC/Grading Contractor meeting. Provided opportunity for industry to submit comments. Meeting minutes with revised proposed revisions provided to industry.



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Kyle Frame	Office: Construction and Materials Item 6	
Submittal Date: 4/26/2021	Proposed Effective Date: October 2021	
Article No.: 2408.02, L, 1	Other:	
Title: General (Bolt Holes)		

Specification Committee Action: Approved with changes.

Deferred: Not Approved: Approved Date: 5/13/2021 Effective Date: 10/19/2021

Specification Committee Approved Text:

2408.02, L, 1, General.

Replace Article a:

Drill, plasma cut (secondary members only), or punch all bolt holes. If utilizing plasma cutting, demonstrate ability to meet tolerance criteria prior to production. Do not punch holes in metal thicker than 3/4 inch for carbon steel and 5/8 inch for alloy steel. Instead, subdrill and ream holes, or drill holes to full size. Subpunch and ream, subdrill and ream, or drill full size holes in main stress carrying members. Punch or drill full size holes for members (other than main stress carrying members) made of Full size punched holes (secondary members only) are allowed for metal no thicker than 3/4 inch for carbon steel and 5/8 inch for alloy steel.

Add the Article:

- **d.** Ensure all bolt holes meet the following criteria:
 - 1) Hole axis is square to faying surface within 1 in 20.
 - 2) No tears, cracks, fins, burrs, or other anomalies that could result in stress concentration or impede intimate contact at the faying surface
 - 3) Round within +/- 1/32 inch.
 - 4) For bolt holes in primary members, within +1/32, -0 inch. For bolt holes in secondary members or in crossframes or diaphragm connection plates, within +1/16, -0 inch.
 - 5) Maximum surface roughness of ANSI 1000 micro inches.

Comments: Construction and Materials requested to clarify the last sentence of Article 2408.02, L, 1, a.

Specification Section Recommended Text:

2408.02, L, 1, General.

Replace Article a:

Drill, plasma cut (secondary members only), or punch all bolt holes. If utilizing plasma cutting, demonstrate ability to meet tolerance criteria prior to production. Do not punch holes in metal thicker than 3/4 inch for carbon steel and 5/8 inch for alloy steel. Instead, subdrill and ream holes, or drill holes to full size. Subpunch and ream, subdrill and ream, or drill full size holes in main stress carrying members. Punch or drill full size holes for members (other than main stress carrying members) made of metal no thicker than 3/4 inch for carbon steel and 5/8 inch for alloy steel.

Add the Article:

d. Ensure all bolt holes meet the following criteria:

- 1) Hole axis is square to faying surface within 1 in 20.
- 2) No tears, cracks, fins, burrs, or other anomalies that could result in stress concentration or impede intimate contact at the faying surface
- 3) Round within +/- 1/32 inch.
- **4)** For bolt holes in primary members, within +1/32, -0 inch. For bolt holes in secondary members or in crossframes or diaphragm connection plates, within +1/16, -0 inch.
- 5) Maximum surface roughness of ANSI 1000 micro inches.

Comments:

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

2408.02, L Bolt Holes.

1. General.

- a. Drill, plasma cut or punch all bolt holes. Plasma cut holes are only allowed in secondary members. Demonstration of plasma cut holes to meet tolerance criteria is required prior to production. Do not punch holes in metal thicker than 3/4 inch for carbon steel and 5/8 inch for alloy steel. Instead, subdrill and ream holes, or drill holes to full size. Subpunch and ream, subdrill and ream, or drill full size holes in main stress carrying members. Punch or drill full size holes for members (other than main stress carrying members) made of metal no thicker than 3/4 inch for carbon steel and 5/8 inch for alloy steel.
- **b.** When reaming is required, subpunch or subdrill all holes. Subdrilling will be required if thickness limitations govern. Subpunch or subdrill holes 3/16 inch smaller than the nominal diameter of the bolts. After assembling, either ream holes to 1/16 inch larger or drill holes full size to 1/16 inch larger than the nominal diameter of the bolts.
- **c.** In steel templates, place hardened steel bushings in holes accurately dimensioned from the centerline of the connections as inscribed on the template. Use the centerline to accurately locate the template from the milled or scribed ends of the members.
- d. Ensure all bolt holes meet the following criteria:
 - 1) Hole axis is square to faying surface within 1 in 20.
 - 2) No tears, cracks, fins, burrs, or other anomalies that could result in stress concentration or impede intimate contact at the faying surface
 - 3) Round within +/- 1/32 inch.
 - 4) For bolt holes in primary members, within +1/32, -0 inch. For bolt holes in secondary members or in crossframes or diaphragm connection plates, within +1/16, -0 inch.
 - 5) Maximum surface roughness of ANSI 1000 micro inches.

Reason for Revision: Industry request to update our Specifications to match AASHTO guidance allowing plasma cut holes in secondary members.

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 / Kyle Frame	Office: Construction and Materials	Item 7	
Submittal Date: 4/23/2021	Proposed Effective Date: October 2021		
Article No.: 2408.03, S, 5, a, 6 Title: Installing High Strength Fasteners	Other:		

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 5/13/2021 Effective Date: 10/19/2021

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

2408.03, S, 5, a, 6.

Replace Table 0408.03-2:

Table 2408.03-2: Minimum Bolt Tension

Bolt Dia. inches	Min. Bolt Tension, Ibf. ^(a)	Bolt Dia. inches	Min. Bolt Tension, Ibf. ^(a)	
1/2	12,050	1 1/8	56,450 64,900	
5/8	19,200	1 1/4	71,700 82,400	
3/4	28,400	1 3/8	85,450 98,200	
7/8	39,250	1 1/2	104,000 119,500	
1	51,500			
(a) Equal to the proof load (length measurement method) given in				
ASTM F 3125.				

Comments:

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

Replace table 2408.03-2:

Table 2408.03-2: Minimum Bolt Tension

Bolt Dia. inches	Min. Bolt Tension, Ibf. ^(a)	Bolt Dia. inches	Min. Bolt Tension, Ibf. ^(a)	
1/2 5/8 3/4 7/8	12,050 19,200 28,400 39,250 51,500	1 1/8 1 1/4 1 3/8 1 1/2	56,450 71,700 85,450 104,000	
(a) Equal to the proof load (length measurement method) given in F 3125.				

With:

Table 2408.03-2: Minimum Bolt Tension

Bolt Dia.	Min. Bolt Tension, Ibf. ^(a)	Bolt Dia. inches	Min. Bolt Tension, Ibf. ^(a)
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	7						
	1/2 5/8 3/4 7/8	12,05 19,20 28,40 39,25 51,50	0 0 0	1 1/8 1 1/4 1 3/8 1 1/2	64,900 82,400 98,200 119,500		
	(a) Equal to the 3125.	·		measurement	method) given i	n F	
Reason for Revision bolt tension on bolts 1					jes made in	AST	M F3125 for minimum
New Bid Item Require	ed (X one)		Yes		N	o X	(
Bid Item Modification	Required ((one)	Yes		N	o X	(
Bid Item Obsoletion Required (X one)			Yes		N	o X	(
Comments:			-1		,		
County or City Comm	nents:						

Industry Comments:



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Jesse Peterson	Office: Construction & Materials Item 8		
Submittal Date: April 2021	Proposed Effective Date: October 2021		
Article No.: 2413.03, H, 12 Title: Limitations of Operations	Other:		

Specification Committee Action: Approved with changes.

Deferred: Not Approved: Approved Date: 5/13/2021 Effective Date: 10/19/2021

Specification Committee Approved Text:

2413.03, H, 12.

Replace the Article:

Do not place concrete mixture without the Engineer's written approval after October 1 and before April 1 without the Engineer's written approval, or when temperatures are forecast by the National Weather Service to be below 40°F during the first 24 hours of the curing period and below 35°F for the next 48 hours of the curing period.

Comments: Construction and Materials asked if we needed to specify where the forecasted temperatures come from to avoid any issues. This was added consistent with Article 2412.03, C, 4.

Specification Section Recommended Text:

2413.03. H. 12.

Replace the Article:

Do not place concrete mixture without the Engineer's written approval after October 1 and before April 1 without the Engineer's written approval, or when temperatures are forecast to be below 40°F during the first 24 hours of the curing period and below 35°F for the next 48 hours of the curing period.

Comments:

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use Strikeout and Highlight.) 2413.03, H, 12. LIMITATIONS OF OPERATIONS.

12. Do not place concrete mixture without the Engineer's written approval after October 1 and before April 1, or when temperatures are forecast to be below 40 F during the first 24 hours of the curing period and below 35 F for the next 48 hours of the curing period without the Engineer's written approval.

Reason for Revision: To provide temperature guidance to restrict overlays from being placed during time periods where they may be exposed to near freezing temperatures during critical curing time without the Engineer's written approval.

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: Mike Kennerly / Daniel Harness	Office: Design	Item 9	
Submittal Date: 4/27/2021	Proposed Effective Date: 10/19/2021		
Article No.: 2505.03, A, 3 Title: Posts	Other:		

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 5/13/2021 Effective Date: 10/19/2021

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: FHWA asked how the inspector was to "ensure posts are not damaged during installation", especially on the bottom end of the post. The intent is for the inspector to see damage at the point of contact on the top of the post. Hopefully any issues underground become apparent during driving and the post can be prebored if necessary.

Specification Section Recommended Text:

2505.03, A, 3, Posts.

Replace the article:

- **a.** Drive posts in a manner that does not damage the post using a hammer driver. Ensure posts are not damaged during installation.
- b. Posts may be set in prebored holes if site conditions are such that posts cannot be driven. Place backfill material (consisting of material removed or other suitable soil) around posts required to be set in prebored holes. Place the backfill material in lifts not exceeding 4 inches. Thoroughly compact each lift before the next lift is placed.
- **b** c.Install the posts to be firm, plumb, and at the location, spacing, and elevation designated.

Comments:

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use <u>Strikeout</u> and <u>Highlight</u>.) 2505.03, A, 3, Posts.

Replace the article:

- **a.** Drive posts using a hammer driver in a manner that does not damage the post. Ensure posts are not damaged during installation.
- b. Posts may be set in prebored holes if site conditions are such that posts cannot be driven. Place backfill material (consisting of material removed or other suitable soil) around posts required to be set in prebored holes. Place the backfill material in lifts not exceeding 4 inches. Thoroughly compact each lift before the next lift is placed.
- bc. Install the posts to be firm, plumb, and at the location, spacing, and elevation designated.

Reason for Revision: The current spec is vague regarding when posts are to be placed in prebored holes. Guardrail posts should be driven whenever possible. Poorly compacted backfill can lead to excessive post rotation during an impact.

New Bid Item Required (X one)	Yes	No
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: Daniel Harness / Dan Sprengeler	Office: Design	Item 10
Submittal Date: April 26, 2021	Proposed Effective Date: OCT 2021	
Article No.: 2528.01, A Title: General (Traffic Control) Article No.: 4188.01 Title: General Requirements (Traffic Control Devices)	Other:	

Specification Committee Action: Approved as recommended.

Deferred: Not Approved: Approved Date: 5/13/2021 Effective Date: 10/19/2021

Specification Committee Approved Text: See Specification Section Recommended Text.

Comments: None.

Specification Section Recommended Text:

2528.01, A, General.

Delete Articles 6, 7, and 8 and renumber Article 9:

- 6. On Interstate and Primary Road projects, use crashworthy Category I and Category II traffic control signs and devices that meet NCHRP Report 350; or MASH 2016 (Manual for Assessing Safety Hardware).
- 7. Upon request provide the following to the Engineer for the purpose of documenting the crashworthiness of Category I and Category II signs and traffic control devices:
 - a. The vendor's self-certification for Category I traffic control devices.
 - **b.** FHWA NCHRP Report 350 or MASH approval memos for Category II signs and traffic control devices.
- 8. A list of approved Category II traffic control devices is found on the World Wide Web at the following URL: https://safety.fhwa.dot.gov/roadway_dept/countermeasures/reduce_crash_severity/.
- 9 6. Provide 10 calendar days advance notification of a pedestrian path closure to the Engineer.

4188.01, General Requirements.

Replace the Article:

- A. Meet the following material requirements for the type of traffic control devices specified.
- B. Temporary Traffic Control Work Zone Devices.
 - 1. Use crashworthy traffic control devices that meet MASH-16 or NCHRP Report 350 as required. Upon request provide the following to the Engineer for the purpose of documenting the crashworthiness of temporary traffic control devices:
 - The vendor's self-certification for Category 1 devices.
 - FHWA Eligibility Letter for NCHRP Report 350 Category 2 and Category 3 devices.

FHWA Eligibility Letter for AASHTO MASH-16 Category 2 and Category 3 devices.

2. FHWA Eligible Devices.

NCHRP Report 350.

https://safety.fhwa.dot.gov/roadway_dept/countermeasures/reduce_crash_severity/listing-archived.cfm?code=workzone

MASH-16.

https://safety.fhwa.dot.gov/roadway_dept/countermeasures/reduce_crash_severity/listing.cfm?code=workzone

3. Category 1 Devices.

- **a.** Category 1 devices include cones, tubular markers, 42 inch channelizers, flexible delineator posts, and plastic drums without attachments.
- **b.** After December 31, 2021 use only MASH-16 compliant Category 1 devices. Category 1 devices may be "self-certified" by each Manufacturer as MASH-16 compliant if there are no attachments to the devices.

4. Category 2 Devices.

- **a.** Category 2 devices include Category 1 devices with attachments, barricades, and portable sign supports.
- **b.** Category 2 devices that meet NCHRP-350 requirements may be used through December 31, 2024. After December 31, 2024 use only MASH-16 compliant Category 2 devices.

5. Category 3 Devices.

- **a.** Category 3 devices include temporary barriers, fixed sign supports, crash cushions, and other work-zone devices not meeting the definitions of Category 1 or Category 2 devices.
- **b.** Category 3 devices that meet NCHRP-350 may be used through December 31, 2029. After December 31, 2029 use only MASH-16 compliant Category 3 devices.

6. Category 4 Devices.

- **a.** Category 4 devices include trailer-mounted devices (i.e. flashing arrow panels, temporary traffic signals, area lighting supports, and portable dynamic message signs.)
- **b.** Currently, there are no Category 4 devices that meet MASH-16 or NCHRP 350 requirements. Category 4 devices shall meet the requirements of the contract documents.

Comments:

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use <u>Strikeout</u> and <u>Highlight</u>.) Delete paragraphs 6, 7, & 8 from 2528.01.A

- 6. On Interstate and Primary Road projects, use crashworthy Category I and Category II traffic control signs and devices that meet NCHRP Report 350; or MASH 2016 (Manual for Assessing Safety Hardware).
- Upon request provide the following to the Engineer for the purpose of documenting the crashworthiness of Category I and Category II signs and traffic control devices:
 - a. The vendor's self-certification for Category I traffic control devices.
 - b. FHWA NCHRP Report 350 or MASH approval memos for Category II signs and traffic control devices.
- **8.** A list of approved Category II traffic control devices is found on the World Wide Web at the following URL: https://safety.fhwa.dot.gov/roadway_dept/countermeasures/reduce_crash_severity/.
- 6 9. Provide 10 calendar days advance notification of a pedestrian path closure to the Engineer.

Add the following to 4188.01

4188.01 GENERAL REQUIREMENTS.

A. Meet the following material requirements for the type of traffic control devices specified.

B. Crash-Worthy Temporary Traffic Control Work Zone Devices.

- 1. Use crashworthy traffic control signs and devices that meet MASH-16 or NCHRP Report 350 as required. Upon request provide the following to the Engineer for the purpose of documenting the crashworthiness of temporary traffic control devices:
 - The vendor's self-certification for Category 1 devices.
 - FHWA Eligibility Letter for NCHRP Report 350 Category 2 and Category 3 devices.
 - FHWA Eligibility Letter for AASHTO MASH-16 Category 2 and Category 3 devices.
- 2. A list of FHWA eligible devices for NCHRP-350 and MASH-16.
 - NCHRP Report 350: https://safety.fhwa.dot.gov/roadway dept/countermeasures/reduce crash severity/listing -archived.cfm?code=workzone
 - MASH-16: https://safety.fhwa.dot.gov/roadway dept/countermeasures/reduce crash severity/listing .cfm?code=workzone

3. Category 1 Devices.

- **a.** Category 1 devices include cones, tubular markers, 42-inch channelizers, flexible delineator posts, and plastic drums without attachments.
- **b.** After December 31, 2021 use only MASH-16 compliant Category 1 devices. Category 1 devices may be "self-certified" by each Manufacturer as MASH-16 compliant if there are no attachments to the devices.

4. Category 2 Devices.

- a. Category 2 devices include Category 1 devices with attachments, barricades, and portable sign supports.
- **b.** Category 2 devices that meet NCHRP-350 requirements may be used through December 31, 2024. After December 31, 2024 use only MASH-16 compliant Category 2 devices.

5. Category 3 Devices.

- a. Category 3 devices include temporary barriers, fixed sign supports, crash cushions, and other work-zone devices not meeting the definitions of Category 1 or Category 2 devices.
- **b.** Category 3 devices that meet NCHRP-350 may be used through December 31, 2029. After December 31, 2029 use only MASH-16 compliant Category 3 devices.

6. Category 4 Devices.

- a. Category 4 devices include trailer-mounted devices (i.e. flashing arrow panels, temporary traffic signals, area lighting supports, and portable dynamic message signs.)
- b. Currently, there are no Category 4 devices that meet MASH-16 or NCHRP 350 requirements. The department has determined that the net benefits of these devices out-weigh the exposure risk. Category 4 devices shall meet the requirements of the contract documents.

Reason for Revision: Specifications need to be revised to meet MASH-16 requirement for crashworthy work zone traffic control devices. The sunset dates for the NCHRP 350 devices will allow contractors to time to turn over their existing traffic control device inventory.

New Bid Item Required (X one)	Yes	No X
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Bid Item Modification Required (X one)	Yes	No X	
Bid Item Obsoletion Required (X one)	Yes	No X	
Comments:			
County or City Comments: Nicole Moore requested that Local agencies be included in this requirement for crash-worthy work zone devices.			

Industry Comments: Met with Traffic Control Subcontractors and they are okay. Future revisions can be made as necessary.



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Mike Kennerly / Daniel Harness	Office: Design	Item 11
Submittal Date: 2/18/2021	Proposed Effective Date: 10/1	9/2021
Article No.: 2551.03, B, 4	Other:	
Title: Crash Cushions		

Specification Committee Action: Deferred to a future meeting.

Deferred: X Not Approved: Approved Date: Effective Date:

Specification Committee Approved Text:

Comments: We need some clarification on permanent installations versus temporary installations that are necessary to remain in place over the winter, which may also require permanent crass cushions. Design will discuss with other affected bureaus to come up with a solution that is fair to Contractors while assuring that we do not have temporary crash cushions left in situations that could be detrimental to public safety.

Specification Section Recommended Text:

2551.03, B, 4.

Replace the article:

When a crash cushion is required to remain in place after the final stage of a project, leave it in place furnish a permanent crash cushion instead of a temporary crash cushion. The crash cushion becomes the property of the Contracting Authority.

Comments: Since there is a separate bid item for permanent crash cushions, isn't this a design issue and not a specification issue? Shouldn't the designer be bidding a permanent crash cushion and not a temporary?

Member's Requested Change: (Do not use '<u>Track Changes'</u>, or '<u>Mark-Up'</u>. Use Strikeout and Highlight.) 2551.03, B, 4.

Replace the article:

When a crash cushion is required to remain in place after the final stage of a project, furnish a permanent crash cushion instead of a temporary crash cushion leave it in place. The crash cushion becomes the property of the Contracting Authority.

Reason for Revision: To clarify that if a temporary crash cushion to be left in place, the Contractor is to furnish a permanent crash cushion rather than a temporary crash cushion.

New Bid Item Required (X one)	Yes	No
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 / Kyle Frame	Office: Construction and Materials Item 12	
Submittal Date: April 23, 2021	Proposed Effective Date: October 2021	
Article No.: 2553.02	Other:	
Title: Materials (Trenchless Construction)		

Specification Committee Action: Approved with changes.

Deferred: Not Approved: Approved Date: 5/13/2021 Effective Date: 10/19/2021

Specification Committee Approved Text:

Comments: None.

Specification Section Recommended Text:

2553.02, A, 2, e, 2.

Replace the first sentence:

Substitution with welded or seamless steel pipe meeting the ASTM/API standard and grade requirements of <u>Article 2553.02</u>, <u>B</u>, <u>1</u> will be allowed.

2553.02, B, 1, Pipe.

Replace the first sentence:

Use only new steel pipe meeting the requirements of ASTM A 139, Grade B; ASTM A 252, Grade 2; ASTM A 53, Grade B or API 5L X Grade.

Comments:

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

Add the following to 2553.02, A, 2, e, 2:

- e. Roadway Pipe Culvert.
 - 1) Reinforced Concrete Pipe: Apply Section 4145.
 - 2) Substitution with welded or seamless steel pipe meeting the ASTM/API standard and grade requirements of <u>Article 2553.02</u>, <u>B</u>, <u>1</u> will be allowed. Concrete transition end sections are required. Meet the requirements of <u>Materials I.M. 440</u> for material acceptance, minimum steel carrier pipe wall thickness, welding criteria and concrete transition end sections.

Add the following to 2553.02, B, 1:

B. Casing Pipe.

1. Pipe.

Use only new steel pipe meeting the requirements of ASTM A 139, Grade B; ASTM A 252, Grade 2; ASTM A 53, Grade B or API 5L X Grade. Pipe may be welded or seamless. Wall thickness will be as specified in the contract documents. Meet the requirements of Materials I.M. 440 for material acceptance.

Reason for Revision: Added an API standard to 2553.02, B, 1 based on industry requesting to use an equivalent material to improve availability and reduce cost.			
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 / Melissa Serio	Office: Construction & Materials	Item 13
Submittal Date: 4/26/21	Proposed Effective Date: October 2021 GS	
Article No.: 2601.03, E, 2, a	Other:	
Title: Straw Mulch		

Specification Committee Action: Deferred to a future meeting.

Deferred: X Not Approved: Approved Date: Effective Date:

Specification Committee Approved Text:

Comments: Construction and Materials indicated that the tackifier should be an EWO item only and measured in acres.

District 3 asked what is to prevent the Contractor from not applying mulch in a timely manner and disking it in, when they could be paid extra to use a tackifier when the ground is frozen. They could be paid extra and save money on not disking. Suggestion was to add language such as "...when beyond the control of the Contractor..." somewhere in this Article. Another suggestion is to come up with a predetermined price for the EWO, so that there is no negotiation and the Contractor does not make money on this procedure. The predetermined price would be the cost of the tackifier and placement minus the eliminated cost of disking that would have normally been included in the cost of mulch.

This revision will be discussed further with industry to see if a predetermined price can be established for the EWO.

Specification Section Recommended Text:

2601.03, E, 2, a, Straw Mulch.

Add the Article:

6) If applied on frozen ground and unable to anchor mulch and when air temperature allows, apply a tackifier over the straw mulch meeting the requirements of Article 4169.07, B, 4, I. This will be paid for as extra work unless provided otherwise in the contract documents.

Comments: Will tackifier be a standard bid item or an EWO bid item? What is the method of measurement? If it's a standard bid item, the MOM and BOP should be included in the specifications.

2601.03, E, 2, a, 6) Add the Article:

6) If applied on frozen ground and unable to anchor mulch and when air temperature allows, apply a tackifier over the straw mulch meeting the requirements of Article 4169.07, B, 4, I. This will be paid for as extra work unless provided otherwise in the contract documents.

Reason for Revision: Provide for alternative method to anchor straw mulch when it is applied to frozen ground.

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	No x

Comments: Create item for Tackifier, Erosion Control

County or City Comments:

Industry Comments: Discussed at 3/23/21 DOT/AGC/Grading Contractor meeting. Provided opportunity for industry to submit comments. Meeting minutes with revised proposed revisions provided to industry.



SPECIFICATION REVISION SUBMITTAL FORM

Submitted by: Wes Musgrove / Melissa Serio	Office: Construction & Materials	Item 14
Submittal Date: 4/26/21	Proposed Effective Date: October 2021 GS	
Section No.: 2602	Other:	
Title: Water Pollution Control (Soil Erosion)		

Specification Committee Action: Approved with changes.

Deferred: Not Approved: Approved Date: 5/13/2021 | Effective Date: 10/19/2021

Specification Committee Approved Text:

2602.01, D, 3.

Replace the Article:

For projects regulated by a NPDES storm water permit, submit an amended PPP site map that identifies erosion and sediment control work performed during the project. Submittal is required prior to payment for corresponding erosion and sediment control contract items from Sections 2601 and 2602, but shall be submitted no later than one week after installation completion of such items. Submittal of amended PPP site map shall be incidental to payment for erosion and sediment control items.

2602.03, E.

Add to the end of the Article:

If stabilization measures are not initiated as required by the NPDES storm water permit, there will be a deduct of \$750 per calendar day, unless such delay is authorized by the Engineer. Additionally, if stabilized areas are re-disturbed within 7 days after completion of stabilization measures, the amount paid for stabilization of the area will be deducted from payment, unless such re-disturbance is directed by the Engineer.

2602.03, Construction.

Add the Article:

O. Stabilized Construction Entrance.

Construct stabilized construction entrance to prevent tracking of material onto roadways. Construct according to the contract documents at locations approved by the Engineer.

2602.04, W. Stabilized Construction Entrance.

Replace the Article:

Linear feet measured along the length of the entrance at the entrance centerline shown in the contract documents adjusted for:

- Any decrease based on site restrictions approved by the Engineer, or
- Any extensions approved by the Engineer to prevent tracking of material onto roadways.

2602.05, C.

Add as the second sentence:

Dispose of cleaned-out silt material off the project unless Engineer approves a suitable site within the project limits.

2602.05, D.

Replace the Article:

If water control measures (including clean-out or repair of installed items) are required due to the Contractor's negligence, carelessness, or failure to install the controls as a part of the work as scheduled, and are ordered by the Engineer, perform this work at no additional cost to the Contracting Authority.

Comments: Standard Road Plan EC-303 will be revised to show a standard length of 100 feet for each stabilized construction entrance. The quantity for Stabilized Construction Entrance will be a plan quantity and not measured for payment. The Engineer will approve any extensions necessary to control debris tracking. Verbiage in Article 2602.03, O was revised to clarify that stabilized construction entrances are to control debris tracking on to roadways and not intended to cover entire non-roadway Contractor traffic.

Specification Section Recommended Text:

2602.01, D, 3.

Replace the Article:

For projects regulated by a NPDES storm water permit, submit an amended PPP site map that identifies erosion and sediment control work performed during the project. Submittal is required prior to payment for corresponding erosion and sediment control contract items from Sections 2601 and 2602, but shall be submitted no later than one week after installation completion of such items. Submittal of amended PPP site map shall be incidental to payment for erosion and sediment control items.

2602.03, E.

Add to the end of the Article:

If stabilization measures are not initiated as required by the NPDES storm water permit, there will be a deduct of \$750 per calendar day, unless such delay is authorized by the Engineer. Additionally, if stabilized areas are re-disturbed within 7 days after completion of stabilization measures, the amount paid for stabilization of the area will be deducted from payment, unless such re-disturbance is directed by the Engineer.

2602.03, Construction.

Add the Article:

O. Stabilized Construction Entrance.

Construct stabilized construction entrance according to the contract documents at locations approved by the Engineer. Item is to prevent tracking of material onto roadways.

2602.04, W, Stabilized Construction Entrance.

Add to the end of the Article:

Length of payment shall not exceed 100 feet.

2602.05, C.

Add as the second sentence:

Dispose of cleaned-out silt material off the project unless Engineer approves a suitable site within the project limits.

2602.05, D.

Replace the Article:

If water control measures (including clean-out or repair of installed items) are required due to the Contractor's negligence, carelessness, or failure to install the controls as a part of the work as scheduled, and are ordered by the Engineer, perform this work at no additional cost to the Contracting Authority.

Comments: Why do we need to clarify the intent of stabilized construction entrance and why are we capping at 100 feet? This seems like design and inspection guidance and not specification language. The Specifications should include how to build it and how to pay for it. The plans should include where and how long. We should pay for the length that is included in the bid documents and any extensions approved by the Engineer, which is stated on SRP EC-303 (Obtain the Engineer's approval for location and length of stabilized entrances prior to constructing).

If we are having issues, make EC-303 show a standard length and don't measure the length. Have them all be 50 feet or 100 feet and make it easier on the designer and inspector.

2602.01, D, 3.

Replace the Article:

3. For projects regulated by a NPDES storm water permit, submit an amended PPP site map that identifies erosion and sediment control work performed during the project. Submittal is required prior to payment for corresponding erosion and sediment control contract items from Sections 2601 and 2602, but shall be submitted no later than one week after installation completion of such items. Submittal of amended PPP site map shall be incidental to payment for erosion and sediment control items.

2602.03, E.

Add to the end of the Article:

If stabilization measures are not initiated as required by the NPDES storm water permit, there will be a deduct of \$750 per calendar day, unless such delay is authorized by the Engineer. Additionally, if stabilized areas are re-disturbed within 7 days after completion of stabilization measures, the amount paid for stabilization of the area will be deducted from payment, unless such re-disturbance is directed by the Engineer.

2602.03. O.

Add the Article:

O. Stabilized Construction Entrance.

Construct Stabilized Construction Entrance according to the contract documents at locations where construction traffic leaves the project site. Item is to prevent tracking of sediment onto roadways.

2602.04, W.

Add to the end of the Article:

Length of payment shall not exceed 100 feet.

2602.05, C.

Replace the Article:

C. When it is necessary for the Contractor to clean out, repair, or reconstruct a silt ditch, dike, or basin, the additional payment will be 100% of the contract unit price for construction of that item. Dispose of cleaned-out silt material off the project unless Engineer approves a suitable site within the project limits. When applicable bid items are not in the contract documents, payment for clean out, repair, or reconstruction will be according to Article 1109.03, B.

2602.05, D.

Replace the Article:

D. If water control measures (including clean-out or repair of installed items) are required due to the Contractor's negligence, carelessness, or failure to install the controls as a part of the work as scheduled, and are ordered by the Engineer, perform this work at no additional cost to the Contracting Authority.

Reason for Revision:

- Provide clarification on requirements for amended PPP site maps.
- Add language regarding deductions if NPDES permit stabilization requirements are not met.

- Provide clarification on intent of Stabilized Construction Entrances and maximum length for payment.
- Provide for disposal location of cleaned out material from silt basins, etc. Language is similar to clean-out of silt fences.
- Add clarification that water control measures include clean-out and repair of installed items.

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: None

County or City Comments:

Industry Comments: Discussed at 3/23/21 DOT/AGC/Grading Contractor meeting. Provided opportunity for industry to submit comments. Meeting minutes with revised proposed revisions provided to industry.