08/01/2014

S204-14.docx

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| Use on all projects with earthwork. |

## Section 204. — EXCAVATION AND EMBANKMENT

**Materials**

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| Use Subsections 204.03, 204.07, 204.15, and 204.16(g) when subexcavation is included in the contract. |

**204.03.** Add the following:

Crushed aggregate 703.06

Geotextile 714.01(a)

Asphalt concrete 403, Type II

**Construction Requirements**

**204.05 Conserved Topsoil.** Delete the first sentence and substitute the following:

Conserve topsoil from the roadway excavation and from embankment foundation areas to the extent and depth determined by the CO.

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| Use Subsection 204.06 on projects with potential rock excavation, even when no rock excavation pay item is included. Check with Geotech on the necessity of controlled blasting. Edit the [use/do not use] text accordingly. |

**204.06 Roadway Excavation.**

**(a) Rock cuts.** Add the following:

When blasting rock, [use/do not use] controlled blasting methods according to Subsection 205.08(b).

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| Use Subsection 204.07 along with 204.03, 204.15, and 204.16(g) when subexcavation is included in the contract. |

**204.07 Subexcavation.** Delete the subsection and substitute the following:

**204.07 Subexcavation.**

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| Enter the geotextile type here provided by the geotechnical engineer. |

Use separation-stabilization geotextile, class X, type X.

Notify the CO of type and source of backfill material anticipated for subexcavation work at the preparatory phase meeting according to Subsection 153.04(a). Excavate unsuitable materials to the limits designated in the plans, or as directed by the CO. Notify the CO of any additional locations requiring subexcavation, or which require a change in surface dimension or depth. Advise the CO of any adverse conditions such as active subsurface water or unstable soil conditions prior to backfilling. Dispose of unsuitable material according to Subsection 204.14. Do not subexcavate during periods of inclement weather.

Submit a neat line drawing of the excavated volume for each subexcavation prior to backfilling. Place geotextile according to Section 207 prior to placing soil or aggregate backfill materials in the subexcavation. Place and compact soil or aggregate backfill according to Section 204.11, or Section 403 for hot asphalt concrete backfill until the subgrade elevation is achieved. Prevent backfill materials from becoming contaminated with unsuitable materials. Replace the excavated structural section with the structural section shown in the typical section of the plans. Adjust the subgrade elevation to accommodate the replacement structural section.

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| Use the following on all projects. |

**204.14 Disposal of Unsuitable or Excess Material.** Add the following:

Secure environmental clearances according to Subsection 107.10(d).

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| Use Subsections 204.15 along with 204.03, 204.07, and 204.16(g) when subexcavation is included in the contract. |

**204.15.** Add the following:

Geotextile will be evaluated under Section 207.

Asphalt concrete will be evaluated under Section 403.

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| Use Subsections 204.16(a) on projects using a pay item for Roadway Excavation |

**Measurement**

**204.16**

**(a) Roadway Excavation.**

**(1)** Include the following volumes in roadway excavation:

*(e)* Delete the text and substitute the following:

Conserved topsoil stripped from cuts.

*(h)* Delete the text and substitute the following:

Conserved material taken from stockpiles and used in Section 204 work except topsoil measured under Section 624. Only materials required to be conserved by the CO are eligible for measurement under this item.

**(2)** Do not include the following in roadway excavation: Add the following:

*(n)* Conserved topsoil stripped from fills.

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| Use Subsection 204.16 (c) on projects using pay item 20420-0000 Embankment construction. |

**(c) Embankment construction.** Delete the text and substitute the following:

Measure embankment construction in its final position. Do not make deductions from the embankment construction quantity for the volume of minor structures.

**(1)** Include the following volumes in embankment construction:

*(a)* Roadway embankments;

*(b)* Material used to backfill holes, pits, and other depressions; and

*(c)* Material used for dikes, ramps, mounds, and berms.

If the project has a large volume of material excavated from an obliteration area that is used in new construction or hauled to separate obliteration areas, include the obliteration volume in the embankment construction quantity. Discuss with the PM and COE. Add (d) to 204.16(c)(1) above and delete (2)(e) below

*(d)* Material imported into the obliteration area or exported out of the obliteration area necessary to restore obliterated roadbeds to original contours.

**(2)** Do not include the following volumes in embankment construction:

*(a)* Preparing foundations for embankment construction;

*(b)* Adjustments for subsidence or settlement of the embankment or of the foundation on which the embankment is placed;

*(c)* Material used to round fill slopes;

*(d)* Material used to backfill subexcavated areas; and

(e) Material used to restore obliterated roadbeds to original contours.

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| Use Subsections 204.16 (g) along with 204.03, 204.07, and 204.15 on projects using pay item 20402-0000 Subexcavation. |

**(g) Subexcavation.** Delete the text and substitute the following:

When a subexcavation pay item is shown in the bid schedule:

**(1**) Measure subexcavation by the cubic yard of excavation measured in its original position

**(2)** Do not measure backfill material and geotextile for payment.

**Payment**

**204.17** Add the following:

Payment for Item 20401 is limited to ten percent of the plan quantity of excavation in the cut until the slope rounding in that cut is completed.