203-R-726 EXCAVATION AND EMBANKMENT

(Revised 11-18-22)

The Standard Specifications are revised as follows:

SECTION 203, BEGIN LINE 385, DELETE AND INSERT AS FOLLOWS:

When free water is encountered, backfilling shall be accomplished using B borrow, in accordance with ~~211.02,~~*904.06 with the exception that ACBF or GBF shall not be used. Backfilling using B borrow shall occur* to an elevation at least 2 ft above the free water level. Compaction of the B borrow placed above the free water level shall be accomplished using heavy vibratory equipment.

The use of hydraulic methods to construct embankments will be allowed only when authorized in writing. Only B borrow *without ACBF or GBF* shall be placed below the free water level. Backfill at structures shall be in accordance with 211.04.

SECTION 203, BEGIN LINE 479, DELETE AND INSERT AS FOLLOWS:

203.13 Slides

When ~~S~~slides *are* encountered during construction*, or when water is observed seeping out of the slope or slope sloughing occurs the Engineer shall be notified. The Engineer will contact the Department's Geotechnical Engineering Division. The Department will provide the remedial measures to address the slope issues. Soil disturbed due to a slide* shall be ~~removed~~*treated* as directed. ~~and their removal~~*Excavation of material resulting from a slide or sloughing event* will be paid for as the class or classes of excavation encountered.

If the contract involves paving, the omission or delay of paving operations may be required at the location of a slide. If proper treatment of a slide has been ~~obtained~~*completed* prior to ~~completion of~~*constructing* the remaining pavement, the ~~gap~~*slide section* may ~~be required to~~ be paved, and payment will be at the contract unit price for pavement.

If ~~proper~~*the* treatment of a slide has not been ~~obtained~~*addressed* prior to completion of the remaining pavement, the ~~gap left at the slide location~~*slide section* shall become an exception to the contract item for pavement.

SECTION 203, BEGIN LINE 690, INSERT AS FOLLOWS:

If water is present, the backfill shall be with material in accordance with 211.02, *with the exception that ACBF or GBF shall not be used*. Placement of this material shall follow as closely behind the removal of the peat as possible. It shall be carried across the area from one end to the other by end-dumping and finally left at the established grade. This grade shall be such that keeps end-dumping to a minimum, which nominally shall be approximately 2 ft above free water level. That portion between free water level and this established grade shall be thoroughly water soaked to secure maximum compaction.

SECTION 203, BEGIN LINE 758, DELETE AND INSERT AS FOLLOWS:

203.18 Embankment Construction

Embankment construction shall consist of constructing roadway embankments, including preparation of the areas upon which they are to be placed; the construction of dikes within or outside the right-of-way; the placing and compacting of approved material within roadway areas where unsuitable material has been removed; and the placing and

compacting of embankment material in holes, pits, and other depressions within the roadway area. Only approved materials shall be used in the construction of embankment backfill. *Recycled concrete pavement shall be from past documented Department projects. RAP shall be the product resulting from the cold milling or crushing of an existing HMA pavement.* Rocks, broken concrete, *RAP*, or other solid materials shall not be placed in embankment areas where piling is to be placed or driven.

Recycled concrete pavement ~~may be used in embankment construction. The recycled material~~ shall meet the *gradation* requirements of B borrow in accordance with ~~211.02 or rock embankment in accordance with 203.20~~*904.06. Construction requirements shall be in accordance with 203.20(a) or 211.03.*

Only RAP particles measuring 2 in. or less in all directions shall be incorporated into the top 5 ft of the embankment. RAP particles incorporated anywhere in the embankment shall be 5 in. or less.

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

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

~~The~~ *R*ecycled concrete pavement *or RAP* ~~may~~*shall* only be ~~placed~~*used* below the *elevation of the* pavement underdrains~~ and shall be constructed in accordance with 203.23~~. *Compacted lift thickness for RAP shall not be greater than 6 in. within the top 5 ft of the embankment. Where the depth of the embankment exceeds 5 ft, the compacted lift thickness for RAP shall not be greater than 12 in.* ~~The~~ *R*ecycled concrete pavement *and RAP* shall not be used within 2 ft of the water table. ~~Proofrolling in accordance with 203.26 shall be performed to cover the whole grade for every 5 ft of fill. Any rut greater than 1/2 in. shall be corrected as directed.~~

Recycled concrete pavement shall be constructed in accordance with 203.20. RAP shall be constructed in accordance with 203.23 or 203.24. Proofrolling in accordance with 203.26 shall be performed to cover the entire grade for every 5 ft of fill.

A geotextile in accordance with 918.02*(c), Type 2B* shall be placed *in accordance with 214* prior to the placement of ~~other material when the material is finer than recycled material~~*subgrade treatment Type IC, Type II, or Type IV in accordance with 207 when recycled concrete pavement or RAP is used for embankment construction. Recycled concrete pavement or RAP shall not be used for embankment construction when subgrade Type I, Type IBC, or Type IBL is specified. Geotextile shall be placed completely covering the top of the embankment. A minimum 24 in. soil encasement shall be constructed concurrently with the recycled concrete pavement or RAP lifts.* ~~A minimum 18 in. encasement suitable for vegetation growth shall be constructed in accordance with~~

~~203.09~~*The soil encasement shall be suitable for vegetation growth and shall be constructed in accordance with 203.09.*
