Design

Pavement Structure

The Pavement Structure is defined as the thickness of the Hot Mix Asphalt (HMA) plus the Aggregate Base Course (ABC).

Construction Requirements

Clearing and Grubbing

Trees, logs, limbs, stumps, brush, and trash and etc. cleared and grubbed from the Project shall be removed from the Site to an offsite location.

Excavations and Embankments

New embankment shall be benched into the existing slopes, where required, in accordance with Section 203.06 of the Standard Specifications Materials Requirements.

Except as required below, embankment material shall have a minimum resistance value (R-value) of 40 when tested by the Hveem Stabilometer.

I-25 Mainline, Accel/Decel Lanes, Auxiliary Lanes and Ramps

The top two feet of subgrade immediately under the proposed Pavement Structure (ABC and HMA/SMA) shall have a minimum resistance value (R-value) of 60 when tested by the Hveem Stabilometer. The minimum horizontal limits for this material shall be the outer limits of the Pavement Structure plus two feet on each side.

Compaction Requirements

The type of compaction for the Project shall be as follows:

- AASHTO T 99 for Subgrades (including embankments and bases of cuts and fills) and class 2 backfill.
- AASHTO T 180 for Subbases, Base Courses and class 1 backfill

Depth of moisture-density control for this Project shall be as follows:

- Full depth of all embankments
- 6 inches for bases of cuts and fills

Reuse of Materials

The Contractor is allowed to use broken concrete that is less than 6 inches in maximum dimension, or broken asphalt that is less than 6 inches in maximum dimension for embankment material provided it is placed in accordance with section 203.06 of the Standard Specifications.

Asphalt millings shall not be used for embankment material, or as Aggregate Base Course within the Pavement Structure.

The Contractor shall not dispose of broken concrete greater than 6 inches in maximum dimension, or asphalt greater than 6 inches in maximum dimension within the project limits.

Material excavated from the channel shall not be used as embankment material.

The existing subgrade may remain in place if approved by the CDOT Project Engineer subject to the following conditions:

1. The Contractor shall conduct a soil survey at locations specified by and in the presence of the Project Engineer confirming that the existing subgrade to remain in place meets the R-value requirements specified above and in the Standard Specifications.
2. If the existing subgrade does not meet the R-value requirements specified above and in the Standard Specifications, the existing subgrade shall be removed 2 feet below the bottom of the proposed Pavement Structure and extend two feet on each side of the proposed Pavement Structure.
3. The removed unacceptable existing subgrade material shall be replaced with a material meeting the above minimum subgrade R-value requirements.

Project Special Provisions

REVISION OF SECTION 203
EMBANKMENT MATERIAL

Section 203 of the Standard Specifications is hereby revised for this project as follows:

In subsection 203.03(a), first paragraph, after the second sentence add the following:

The top two feet of embankment material (immediately below the Aggregate Base Course) shall have a R-value of at least 60 when tested by the Hveem Stabilometer.

All remaining embankment material to be placed on the project shall have a minimum R-value of at least 40 when tested by the Hveem Stabilometer.