

UDOT Minimum Sampling and Testing Requirements

02056 Embankment, Embankment for Bridge, Granular Borrow, and Backfill Placements

Assurance: Soil Classification

Reference: AASHTO M 145

Lot Size: Source / soil type or each 20,000 cubic yards or 30,000 tons thereafter

Frequency per Lot: One per lot

Point of Acceptance: Grade after processing prior to compaction

Sampling Reference: AASHTO T 2

Report/Form:

02056 Free Draining Granular Backfill

Assurance: Sieve analysis (gradation)

Reference: AASHTO T 27 / T 11

Lot Size: Daily Placement

Frequency per Lot: One per 500 tons or 350 cubic yards

Point of Acceptance: Either:

Grade, after processing, prior to compaction.

Or:

Stockpile on the project where approved for daily placement is less than 150 tons or 100 cubic yards.

Sampling Reference: AASHTO T 2

Report/Form:

02056 Embankment, Embankment for Bridge, Granular Borrow, and Backfill Placements

Assurance: Laboratory Maximum Dry Density and Optimum Moisture for Density Standard

Reference: AASHTO T 99 Method D / AASHTO T 180 Method D for A-1 soils

Refer to the Materials Manual of Instruction Section 989 for materials too rocky to apply the correction for coarse particles: greater than 30% retained on the 3/4" sieve. See AASHTO T 224.

Lot Size: Source / soil type and each 20,000 cubic yards or 30,000 tons thereafter

Frequency per Lot: One per 20,000 cubic yards or 30,000 tons for each layer

Point of Acceptance: Grade after processing, prior to compaction

Sampling Reference: AASHTO T 2

Report/Form:

02056 Embankment, Granular Borrow, and Subgrade Placements

Assurance: In-place density

Reference: AASHTO T 310. Use the average of two one-minute readings per test.
Refer to the Materials Manual of Instruction Section 989 for materials too rocky to apply the correction for coarse particles: greater than 30% retained on the ¾" sieve. See AASHTO T 224.

Lot Size: A lot equals material placed to line and grade and compacted in one production day

Frequency per Lot: A lot is divided into equal sublots not to exceed 5000 square yards per lift, 15,000 square yards in cut sections. A minimum of one randomly located determination per subplot.

Point of Acceptance: Grade after Compaction

Sampling Reference: Materials Manual of Instruction -981

Report/Form:

02056 Embankment for Bridge

Assurance: In-place density

Reference: AASHTO T 310, Use the average of two one-minute readings per test.
Refer to the Materials Manual of Instruction Section 989 for materials too rocky to apply the correction for coarse particles: greater than 30% retained on the ¾" sieve. See AASHTO T 224.

Lot Size: One foot lift

Frequency per Lot: Six randomly located determinations per one foot lift. Two of the six determinations must be within two feet of the outside perimeter.

Point of Acceptance: Grade after Compaction

Sampling Reference: Materials Manual of Instruction 981

Report/Form:

02056 Backfill Placements

Assurance: In-place density

Reference: AASHTO T 310, Use the average of two one-minute readings per test.
Refer to the Materials Manual of Instruction Section 989 for materials too rocky to apply the correction for coarse particles: greater than 30% retained on the ¾" sieve. See AASHTO T 224.

Lot Size: A lot equals not more than 40 feet of one pipe, pipe culvert, box culvert, foundation, abutment, backwall, wing wall, drain, or small structure.

Frequency per Lot: Minimum of one random determination per lift.

Point of Acceptance: Grade after Compaction

Sampling Reference: Materials Manual of Instruction 981

Report/Form:

02056 Small Quantities other than Backfill

Assurance: Visual Acceptance of very small quantities of materials other than backfill.

Reference: Acceptance is limited to material being furnished from sources found satisfactory under normal sampling and testing procedures.

Lot Size: Not to exceed 200 cubic yards or 300 tons per day or 1000 cubic yards or 1500 tons per project.

Frequency per Lot: One report for each day material is accepted

Point of Acceptance: Grade

Sampling Reference:

Report/Form:
