KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 2007 EDITION

SECTION 204

EXCAVATION AND BACKFILL FOR STRUCTURES

Page 200-5, subsection 204.1. Add the following bid item:

Granular Backfill (Wingwalls)	Cubic Yard

Page 200-6, subsection 204.3b.(4). Delete the first paragraph and replace with the following:

(4) Spread Footing Bridge Foundations. From the elevation that rock or shale is encountered or from the top elevation of the footing, whichever is lower, excavate the footing as shown in the Contract Documents. No side forming is allowed below the top elevation of rock or shale, or below the top of the footing, whichever is lower. Cut spread footing bridge foundations in rock to within 6 inches of the bottom of footing elevation. Complete the excavation to the required elevation, using hand equipment. Do not use blasting excavation below the top of footing elevation.

Page 200-6, delete subsections 204.3b.(5) and (6). NOTE: Information has been moved to 07-08023, latest revision.

Page 200-8, delete subsections 204.5f. and replace with the following (NOTE: Information from old **subsections 204.5f.(3) and (4)** have been moved to 07-08023, latest revision.):

f. Backfill for Structures.

(1) General. Do not place backfill against any structure without the Engineer's approval.

Remove all shoring, bracing and cofferdams before backfilling a structure.

Use material from the structure excavation or material from the roadway excavation for the backfill of structures. If necessary, adjust the moisture content of the soil by adding water to or aerating the material.

Place granular backfill as detailed in the Contract Documents. If the area for granular backfill is excavated beyond the theoretical limits of the granular backfill, fill the over-excavation with granular backfill material suitable for the conditions, and that meets the Engineer's approval. Do not use hydraulic methods of backfill.

After the designated cure period for a concrete structure expires, wait at least 3 days before subjecting the structure to the pressures of backfilling or to live loads. If adverse curing conditions exist, the Engineer may extend this period.

Provide for drainage at all weep holes in concrete structures. Unless drainage is provided for otherwise in the Contract Documents, place approximately 2 cubic feet of crushed stone or sand gravel at each weep hole.

Place the backfill in horizontal layers evenly on all sides of the structure, a maximum of 8 inches thick (loose measurement). If the backfill is placed on only one side of a structure (such as abutments, piers, wingwalls), do not put excessive pressure against the structure. Prevent wedging action against the structure during the backfill. Bench the slopes bounding the excavation.

Extend each layer of the backfill to the limits of the excavation or to the original ground line. Continuously level and manipulate the material during the placing and compacting of each layer of the backfill. Use a motorgrader where possible. Compact each layer as specified before placing the next layer.

Drain all water from areas before backfilling. If backfill compaction is not required for piers, it is not necessary to drain the water from the pier excavations before backfilling.

If it is impossible to drain the water, deposit thin layers of backfill material into the water. When placing backfill material into water, the compaction requirements do not apply until the backfill progresses to the point that all water is absorbed by the backfill material.

Unless otherwise shown in the Contract Documents, backfill compaction is not required around piers, except piers adjacent to railroad tracks, roadways or in the toe slopes of embankments.

If the Contract Documents provide for "Compaction of Earthwork", compact the backfill according to **SECTION 205**. If the Contract Documents do not provide for compaction, compact the backfill according to Type B compaction in **SECTION 205**.

If the Contract Documents designate a moisture range for the embankment adjacent to the structure, use backfill material with uniform moisture content within the specified range according to **SECTION 205**. If the Contract Documents do not designate a moisture range, use backfill material with uniform moisture content adequate to produce the specified density.

(2) Backfill of Reinforced Concrete Box. If the top of a reinforced concrete box extends above the original ground line, continue the compacted backfill to the top of the reinforced concrete box. Place the backfill 10 feet wide on each side of the culvert for the full width of the roadway embankment.

(3) Granular Backfill (Wingwalls) (Set Price). When designated in the Contract Documents, construct the granular backfill for wingwalls according to the details shown.

(4) Granular Backfill (Wingwalls). When designated in the Contract Documents, construct the granular backfill for wingwalls according to the details shown.

Page 200-10, Delete subsection 204.4b.(6) and replace with the following:

(6) Granular Backfill, Granular Backfill (Wingwalls) and Granular Backfill (Wingwalls) (Set Price). The Engineer will measure granular backfill by the cubic yard. The Engineer will measure to the neat lines shown in the Contract Documents. The Engineer will not measure for payment the excavation required to place the granular backfill or any granular backfill material placed beyond the limits shown in the Contract Documents (over-excavated areas).

Page 200-10, delete the first paragraph in subsection 204.4c. and replace with the following:

c. Payment. Payment for the various classes of "Excavation", the various grades of "Concrete", "Foundation Stabilization", "Granular Backfill" and "Granular Backfill (Wingwalls)" at the contract unit prices is full compensation for the specified work.

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