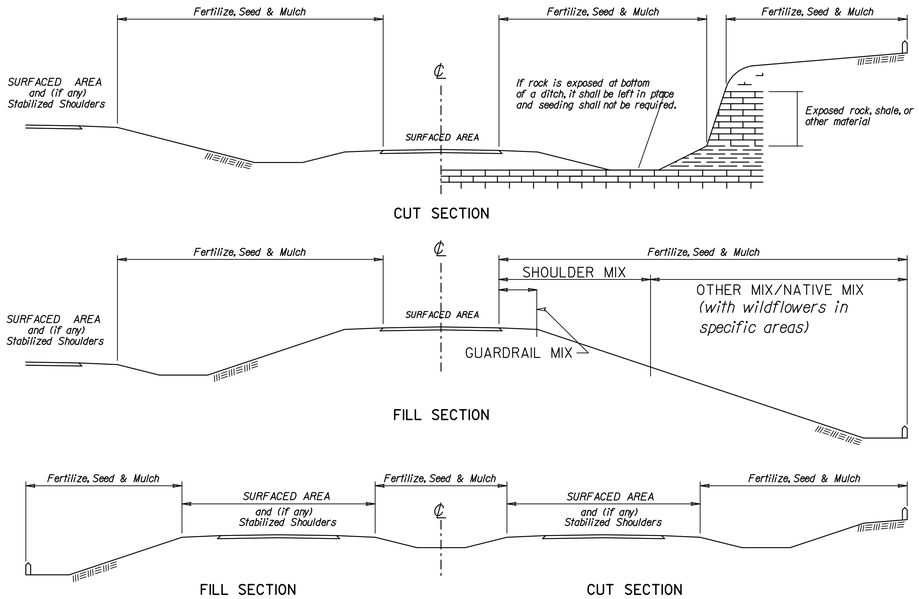
| STATE | PROJECT NO. | YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|
| KANSAS | 472-84595 | 2008 | 37 | 43 |
| KDOT PROJECT NO. 87 N-0360-01 | | | | |




TYPICAL SECTION -- DUAL PAVEMENT

## SEEDING PERIODS

| COOL SEASON | WARM SEASON |
|---|---|
| February 15 to April 20 and August 15 to Sept. 30 | November 15 to June 1 |
| SPECIES | SPECIES |
| Bluegrasses | Bluestems |
| Bromegrasses | Buffalograss |
| Canada Wildrye | Eastern Gamagrass |
| Fescues | Gramas |
| Ryegrasses | Indiangrass |
| Wheatgrasses | Lovegrasses |
| Reed Canarygrass | Switchgrass |
| | Wildflower Mixes |
| | |
| | |

When "Cool Season" species are mixed with "Warm Season" species, in areas of 1 acre or more, the mixture shall be seeded during the "Warm Season". In areas of less than 1 acre, the mixture of "Cool Season" and "Warm Season" species may be seeded during the "Warm or Cool Seasons".

## SODDING PERIODS

March 1 to April 15
**and**
**September 1 to November 15**

GENERAL: The entire disturbed area, excepting the paved or surfaced areas, steep rocky slopes and areas of undisturbed native sod or other desirable vegetation shall be fertilized (limed when required), seeded, and mulched. Soil preparation shall conform to the Standard Specifications except as noted below.

All borrow areas shown on the plans are to be fertilized, seeded, and mulched. However, operation in borrow areas where crops are growing may be omitted when requested by the owner.

It shall not be required to till the area to bare ground prior to permanent seeding. If temporary cover has provided stable slopes with no erosion, seed the permanent grasses into the existing cover. If there has been erosion that requires repair prior to seeding, then it may be necessary to regrade the area, resulting in bare ground.

FERTILIZER: A ratio and application rate that equals or exceeds the required minimum rate per acre of N, $P_2O_5$, $K_2O$ listed in Summary of Seeding Quantities will be acceptable.

MULCHING: Mulch shall be spread uniformly over all disturbed areas and punched in the soil, unless otherwise noted on the plans. The rate of application per acre, thickness in place, for the mulching material is as follows:

1¾ - 2¼ Tons per Acre = 1½" loose depth spread uniformly over acre.

Agricultural products, such as native prairie hay, used for mulching and erosion control practices, excluding wood based mulch, shall meet the North American Weed Free Forage Standards. Refer to Special Provision Subsection 2108.04 "Mulching".

Other vegetative mulches (Acceptable only with the Engineer's concurrence).

The above rate is a guide. It will be at the discretion of the Engineer to determine what rate is sufficient for adequate protection of newly seeded areas.

The amount of mulch in the bid quantities is estimated. The total mulch required shall be determined in the field. The bid item for mulching shall be paid for by one of the following ways: A) Plan quantity as shown on Summary of Quantities, Seeding Sheet or Water Pollution Control Sheet, B) Slope measurement as measured in field, or C) Drill measurement less 5% as measured at the time of seeding.

## SUMMARY OF SEEDING QUANTITIES

| P.L.S. RATE/ACRE SHLDR | P.L.S. RATE/ACRE OTHER | | | ACRES SHLDR | ACRES OTHER | | | BID ITEM | QUANTITY | UNIT |
|---|---|---|---|---|---|---|---|---|---|---|
| — | — | | | — | — | | | Sod (Bermuda Grass Strips) | 41.6 | S.Y. |
| — | 225 | | | — | .009 | | | Fertilizer (29-4-3) (Subsidiary to Sod) | 2 | Lbs. |

## NATIVE WILDFLOWER MIX

| PLS RATE | NAME | QTY (lb) |
|---|---|---|
| 0.2 | Black Eyed Susan | |
| 0.1 | Illinois Bundleflower | |
| 0.2 | Maximilian Sunflower | |
| 0.1 | Purple Prairieclover | |
| 0.1 | Showy Partridgepea | |
| 0.1 | Upright Coneflower | |
| 0.8 lb | Total (lb) | |

## NATIVE WILDFLOWER MIX - TALL

| PLS RATE | NAME | QTY (lb) |
|---|---|---|
| 0.2 | Butterfly Milkweed | |
| 0.2 | Clasping Coneflower | |
| 0.2 | Grayhead Coneflower | |
| 0.2 | Lance-leaf Coreopsis | |
| 0.1 | New England Aster | |
| 0.2 | Pale Purple Coneflower | |
| 0.2 | Plains Coreopsis | |
| 0.2 | Purple Coneflower | |
| 0.4 | Purple Prairie Clover | |
| 0.1 | Roundhead Lespedeza | |
| 0.1 | Thickspike Gayfeather | |
| 0.1 | Upright Coneflower | |
| 0.2 | Wild Bergamont | |
| 0.1 | Showy Primrose | |
| 0.1 | Lemon Mint | |
| 2.6 lb | Total (lb) | |

*Package and deliver the wildflower seed separately from the grass seed mix. Package and deliver the Tall Drop Seed separately from the grass seed and the wildflower mix. Place the grass seed (except Tall Drop Seed) in the large seed box and drill (cover) seed 1/8"-1/4". Place the wildflower seed in a separate seed box and drill (cover) seed 1/16" maximum. Place the Tall Drop Seed in a separate (third) seed box and place the seed (using the seed drill) on the soil surface.*
*OPTION: Broadcast Tall Drop Seed on the soil surface.*

*SHLDR = Shoulder Turf Mix: Includes a 30 foot wide strip along the stabilized shoulder on each side of each traveled way, plus all median areas less than 60 feet wide.*

*OTHER = All other turf areas except Shoulder, Guardrail, and Native areas usually include the Native Wildflower Mix.*

*GRDRL = Guardrail Mix: This mix does not need mowing. Plant it below the guardrail between the edge of pavement and the edge of the 10:1 slope, and on steep slopes or non-mowable slopes as shown on the drawings.*

*NATIVE = The Native Mix is a 40% wildflower, 60% native grass mix. See this sheet for the locations of this high wildflower content seed mix.*

*NOTE: Projects of less than 1 acre shall be bid as "Seeding" by the lump sum. All disturbed areas shall be seeded, fertilized and mulched at the listed rate per acre. The acres are estimated.*

| NO. | DATE | REVISIONS | BY | APP'D |
|---|---|---|---|---|
| 4 | | | | |
| 3 | 12/14/05 | Revised Standard | CDS | SHS |
| 2 | 6/16/05 | Revised Standard | SHS | SHS |
| 1 | 3/01/04 | Revised Standard | FCM | SHS |

**KANSAS DEPARTMENT OF TRANSPORTATION**

PERMANENT SEEDING
SUMMARY OF SEEDING QUANTITIES

LA850

| | | | | | |
|---|---|---|---|---|---|
| F.H.W.A. APPROVAL | | 1/04/2006 | APP'D | Scott H. Shields | |
| DESIGNED | MRM | DETAILED | MRM | QUANTITIES | TRACED MRM |
| DESIGN CK. | SHS | DETAIL CK. | SHS | QUAN.CK. | TRACE CK. SHS |

Std. Base File: la850.dgn
Plotted By: unfilled
Plot Location: $$KDOTGRP$$
File: I:\2006\060006\final\09_02_2008\06008-000-La850.dgn
Plot Date: 9/3/2008