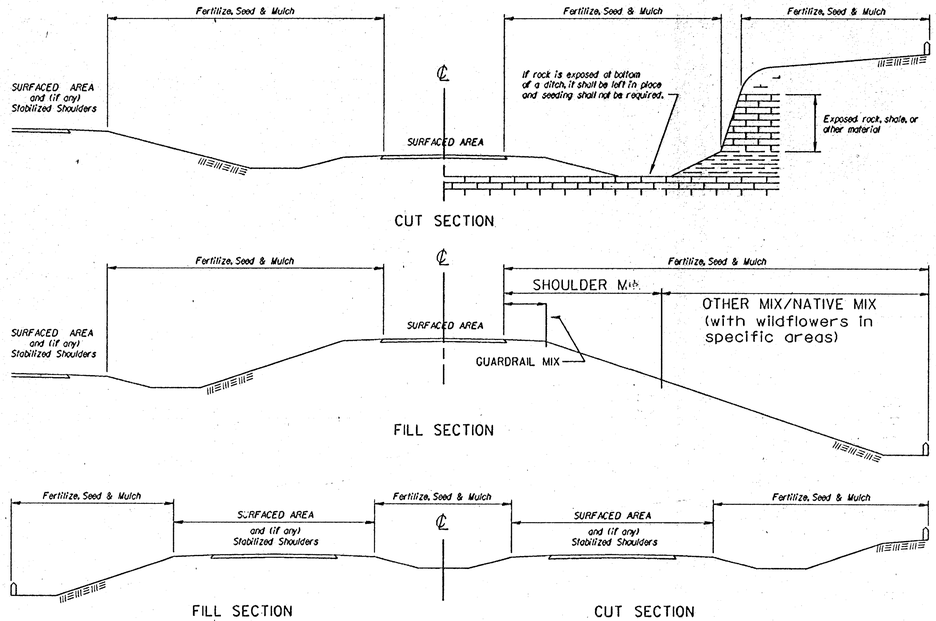
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N0230-01	2003	47	73



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 0.4 hectares or more, the mixture shall be seeded during the "Warm Season". In areas of less than 0.4 hectares, 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.

Temporary seeding shall be done during any time of the year that the soil can be cultivated. After the temporary seeding has been completed on the entire project, a permanent seeding shall be done by another project during the normal seeding season.

The Contractor will be required to finish areas of excavation, borrow and embankment in accordance with the specifications. Areas that require installation or construction of temporary water pollution control items will be finished in reasonable close conformity to the alignment, grade and cross section shown on the plans or as established by the Engineer.

FERTILIZER: A ratio and application rate that equals or exceeds the required minimum rate per hectare of N, P_2O_5, K_2O listed in Summary of 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 hectare, thickness in place, for the various mulching material is as follows:

3,900 - 5,000 Kilograms per Hectare = 40mm loose depth spread uniformly over hectare.

All mulch shall be noxious weed free native prairie hay.

Other vegetative mulches (acceptable only with the Engineer's concurrance).

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/HECTARE SHLDR	P.L.S. RATE/HECTARE OTHER			HECTARES SHLDR	HECTARES OTHER			BID ITEM	QUANTITY •	UNIT
					1.28			Grass Sod (Turf Type Fine-Bladed Fescue Blend	12 758	sq m

• Quantities are for information only. Seeding will be bid as 1 Lump Sum.

EROSION CONTROL (CLASS X, TYPE Y)

STATION TO STATION	SIDE	LENGTH (m)	WIDTH (m)	SQ MTRS
TOTAL EROSION CONTROL (CLASS X, TYPE Y) =				

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 3.2 mm - 6.4mm. Place the wildflower seed in a separate seed box and drill (cover) seed 1.6 mm 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.

NATIVE WILDFLOWER MIX

PLS RATE	NAME	QTY (kg)
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 kg	Total (kg)	

NATIVE WILDFLOWER MIX - TALL

PLS RATE	NAME	QTY (kg)
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	
0.2	Showy Partridge Pea	
0.1	Thickspike Gayfeather	
0.1	Upright Coneflower	
0.2	Wild Bergamont	
0.1	Showy Primrose	
0.1	Lemon Mint	
2.6 kg	Total (kg)	

SHLDR = Shoulder Turf Mix: Includes a 9 meter wide strip along the stabilized shoulder on each side of each traveled way, plus all median areas less than 18 meters 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 1:10 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 0.4 hectares be bid as "Seeding" by the lump sum. All disturbed areas shall be seeded, fertilized and mulched at the listed rate per hectare. The hectares are estimated.

NO.	DATE	REVISIONS	BY	APP'D
4				
3	3/01/04	Revised Standard	FCM	SHS
2	7/18/03	Revised Standard	FCM	SPV
1	5/10/99	Revised Standard	WCL	RDR

KANSAS DEPARTMENT OF TRANSPORTATION

EROSION CONTROL
SEEDING-SODDING
SUMMARY OF SEEDING QUANTITIES

LA850 SI

F.H.W.A. APPROVAL		3/11/2004	APP'D	Scott H. Shields	
DESIGNED	FCM	DETAILED	FCM	QUANTITIES	TRACED FCM
DESIGN CK.	SHS	DETAIL CK.	SHS	QUAN.CK.	TRACE CK. SHS

Drawn By: untitled
DGN File: $$$$$$$$$$$$$$DGNSPEC$$$$$$$$$$$$$$
Plotted: 6/10/2004 View= PLOT 2