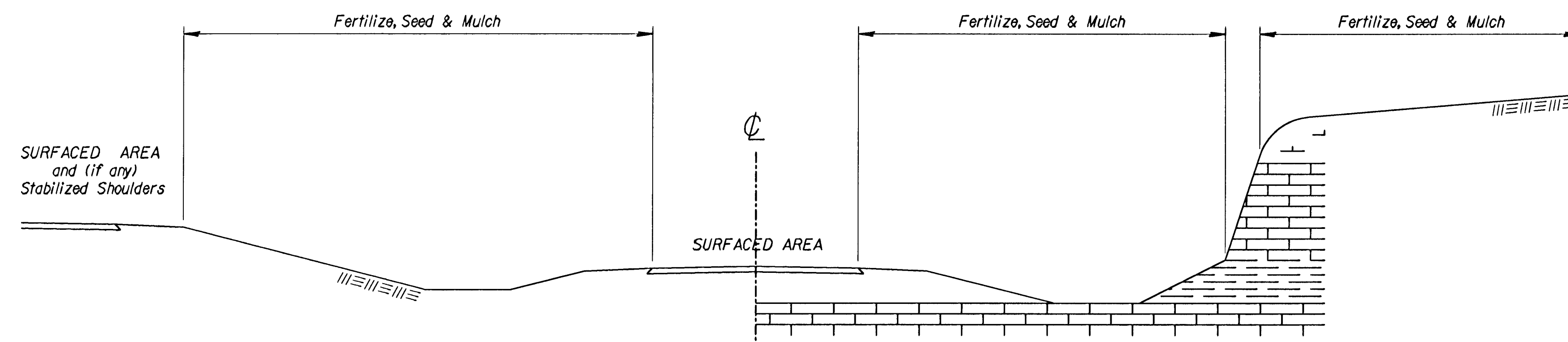
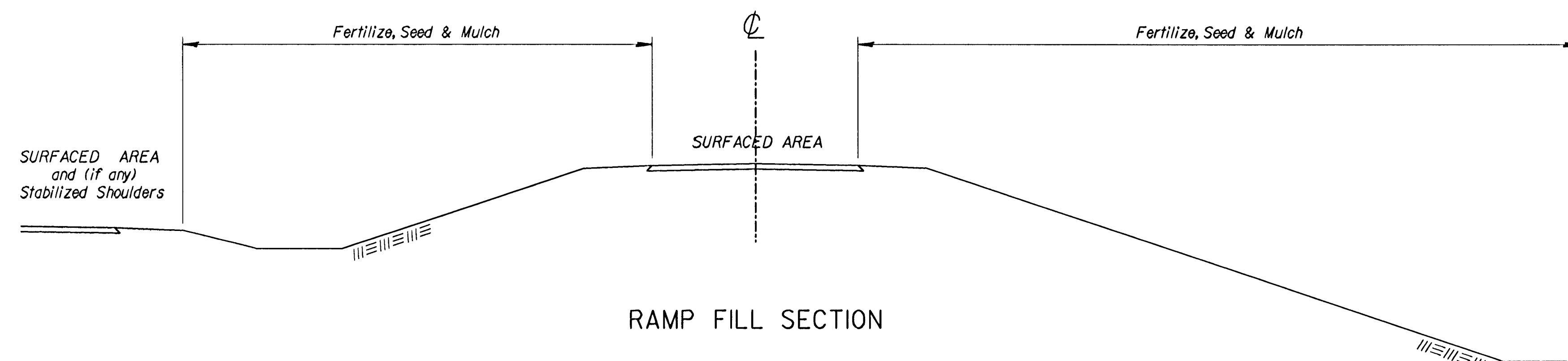


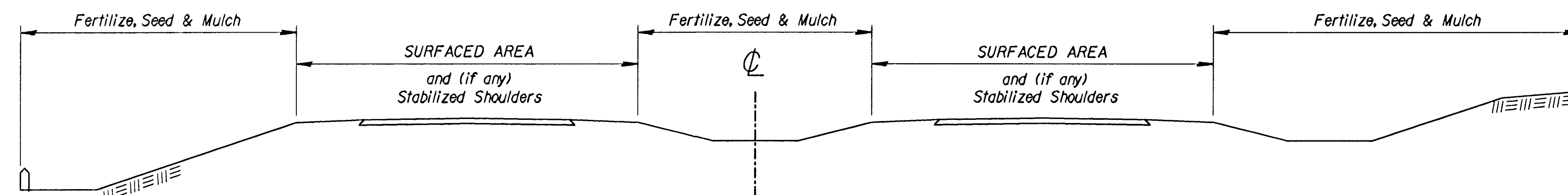
| FHWA<br>REGION<br>NO. | STATE  | PROJECT NO. | YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
|-----------------------|--------|-------------|------|--------------|-----------------|
| 7                     | KANSAS | 87N-0116-01 | 1999 | 57           | 110             |



RAMP CUT SECTION



RAMP FILL SECTION



FILL SECTION

CUT SECTION

TYPICAL SECTION -- DUAL PAVEMENT

| SEEDING PERIODS                                                                                                                                                                                                                                                                                  |                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| COOL SEASON<br>February 15 to April 20<br>and<br>August 15 to Sept. 30                                                                                                                                                                                                                           | WARM SEASON<br>December 1 to April 30 |
| SPECIES                                                                                                                                                                                                                                                                                          | SPECIES                               |
| Bluegrasses                                                                                                                                                                                                                                                                                      | Bluestems                             |
| Bromegrasses                                                                                                                                                                                                                                                                                     | Buffalograss                          |
| Fescues                                                                                                                                                                                                                                                                                          | Eastern Gamagrass                     |
| Ryegrasses                                                                                                                                                                                                                                                                                       | Gramas                                |
| Wheatgrasses                                                                                                                                                                                                                                                                                     | Indiangrass                           |
| Reed Canarygrass                                                                                                                                                                                                                                                                                 | Lovegrasses                           |
|                                                                                                                                                                                                                                                                                                  | Switchgrass                           |
|                                                                                                                                                                                                                                                                                                  | Wildflower Mixes                      |
| When "Cool Season" species are mixed with "Warm Season" species, in areas of 2 hectares or more, the mixture shall be seeded during the "Warm Season". In areas of less than 2 hectares, the mixture of "Cool Season" and "Warm Season" species may be seeded during the "Warm or Cool Seasons". |                                       |

Drawn By : \$\$USERNAME\$\$  
 DGN File : \$\$\$DGN\$SPEC\$\$\$\$\$  
 Plotted : \$\$\$SYTIME\$\$\$\$\$ View= PLOT 1

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 (lmed 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<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O 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 materials are as follows:

|                                                                             |                |                       |                                                      |
|-----------------------------------------------------------------------------|----------------|-----------------------|------------------------------------------------------|
| Prairie Hay                                                                 | 3,900 - 5,000  | Kilograms per Hectare | = 40mm loose depth spread uniformly over hectare.    |
| Bromegrass                                                                  | 3,900 - 5,000  | Kilograms per Hectare | = 40mm loose depth spread uniformly over hectare.    |
| Wheat or Oats Straw                                                         | 3,400 - 4,500  | Kilograms per Hectare | = 80mm loose depth spread uniformly over hectare.    |
| Wood Chips                                                                  | 9,000 - 11,200 | Kilograms per Hectare | = 25-50mm loose depth spread uniformly over hectare. |
| Wood Fiber                                                                  | 1,700 - 2,200  | Kilograms per Hectare | = loose depth spread uniformly over hectare.         |
| Other vegetative mulches (Acceptable only with the Engineer's concurrence). |                |                       |                                                      |

The above rates are 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.

(FOR INFORMATION ONLY)

| SUMMARY OF SEEDING QUANTITIES |               |                               |          |         |
|-------------------------------|---------------|-------------------------------|----------|---------|
| P.L.S.<br>RATE/<br>HECTARE    | *<br>HECTARES | BID ITEM                      | QUANTITY | UNIT    |
| 225                           | 1.8           | FERTILIZER (16-20-0)          | 405      | Kg      |
| 600                           | 1.8           | FESCUE (TALL TURF TYPE BLEND) | 1080     | Kg      |
|                               |               |                               |          |         |
|                               |               |                               |          |         |
|                               |               |                               |          |         |
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|                               |               |                               |          |         |
|                               |               |                               |          |         |
|                               |               |                               |          |         |
|                               |               | MULCHING                      | 1.8      | HECTARE |

\* NOTE: Projects of less than 2 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.

|     |         |                                |     |       |
|-----|---------|--------------------------------|-----|-------|
| 3   | 7-79    | PAVEMENT CHENING               | WNJ | DCH   |
| 2   | 7-18-95 | CONVERT TO SI                  | DAK | RDR   |
| 1   | 6-11-93 | Revised Seeding Dates and note | HLH | RDR   |
| NO. | DATE    | REVISIONS                      | BY  | APP'D |

**KANSAS DEPARTMENT OF TRANSPORTATION**

EROSION CONTROL  
SEEDING-SODDING  
SUMMARY OF SEEDING QUANTITIES

**LA850 SI**

|                   |                |                |                 |
|-------------------|----------------|----------------|-----------------|
| F.H.W.A. APPROVAL | 8-8-95         | APP'D          | Richard D. Ross |
| DESIGNED          | WCL DETAILED   | WCL QUANTITIES | TRACED          |
| DESIGN CK.        | RDR DETAIL CK. | RDR QUAN.CK.   | TRACE CK. WCL   |