STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	52 U-1785-01	2003	78	143

~~GENERAL~~ NOTE:

On surfacing ~~projects~~ the 150 mm of Compaction Type AA, ~~shown for~~ the center portion on the roadbed, is ~~for the~~ purpose of restoring ~~the~~ original Compaction Type AA which may have been lost since grading ~~operations~~. The exact locations of this Compaction Type AA which will be ~~required~~, is to be determined ~~by the~~ Engineer at the time of construction. ~~This work~~ shall be paid under the bid item "Compaction ~~of Earthwork (Type AA)~~(MR-)".

~~Over all~~ structures, unless otherwise directed by the Engineer, where the ~~top of~~ the hubguard is ~~level with~~ or above the finished shoulder grade, ~~the earth~~ cover over the structure slab shall be removed ~~and backfilled with~~ _____ material as directed by the Engineer. ~~The removal of this material~~ will be subsidiary.

The _____ material used to backfill over the ~~structure~~ shall be ~~paid for~~ at the prices shown in the contract.

~~The earth shoulders shall be compacted full depth (Type B)(MR 90) except, when ordered by the Engineer, the top 75 mm shall be left uncompacted for seeding.~~

All ~~side roads and~~ house entrances shall be surfaced with Plant Mix Bit. Mix Comm. Grade. ~~to the R/W line as indicated on the detail.~~ All ~~side roads and~~ house entrances with existing asphalt surface shall be surfaced with Plant Mix Bit. Mix Comm. Grade at least to the ~~R/W line or to the~~ end of construction, as directed by the Engineer. ~~Each mailbox turnout (ON PROJECTS WHERE STABILIZED SHOULDERS ARE NOT SPECIFIED) shall be surfaced with _____ to the limits shown on the detail.~~

~~Surfacing material (SA-_____) shall be used for surfacing house entrances and side roads (_____ m^3/m^2) beyond the limits of the asphalt surface to the limits of construction as determined by the Engineer.~~

~~The thickness of side road and entrance surfacing may be increased to the same thickness as the stabilized shoulder within the approximate limits of the shoulder.~~

On projects which specify both bituminous base and surface course materials, ~~side roads,~~ house entrances ~~and mailbox turnouts~~ may be surfaced with both materials at the contractors option, with the approval of the Engineer.

~~Quantities for aggregate for shoulders, AS-1, are calculated on the basis of 2 400 kg/m.^{3} Quantities for stabilized base course, AB-3, are calculated on the basis of 2 499 kg/m.^{3} Mass per m^3 includes moisture allowed by specification.~~

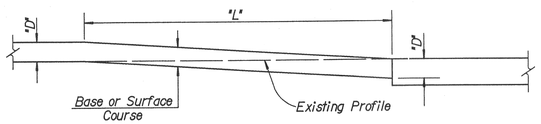
The base course shall be constructed to the plan thickness as shown.

Thicknesses indicated for all construction which is paid for on a mass or volume basis are approximate and may vary to correct for unevenness in the foundations or for other normal unevenness encountered in placement operations.

A tack coat of SS-1H or CSS-1H shall be provided between each lift of all base courses and surface courses and under the first lift of base or surface courses when they are placed on an existing bituminous, brick, or concrete surface, when so ordered by the Engineer and at the rate designated by him/her. ~~Quantities are included for these tacks calculated at the rate of 0.14 L/m^2.~~

Bituminous Material quantities are calculated on the basis of 1 000 kg/1.00209 m^3.

Shoulder rumble strips will not be constructed as part of this project.



TYPICAL PROFILE AT GRADE CONTROL POINTS

The Contractor shall cut the subgrade in accordance with this profile at all grade control points, i.e.; existing pavements, grade bridges, R.R. crossings, and at changes in thickness of base or surface courses. The ratio of $\frac{L}{D}$ shall be not less than 300 mm per mm thickness.

The work of cutting the subgrade and disposing of excess excavated material shall be subsidiary to other items in the contract.

SUMMARY OF QUANTITIES

ITEM	DRIVEWAYS	TEMP. WIDENING		TOTAL	UNIT
PHASE I					
△ Hot Mix Asphalt - Commercial Grade (Class A)	Ø 113.30	2 351.75		2 465.05	Mg
Surfacing Material (SA-1)	44.3			44.3	cu m
PHASE 2					
△ Hot Mix Asphalt - Commercial Grade (Class A)	Ø 144.65	166.85		311.50	Mg
Surfacing Material (SA-1)	24.3			24.3	cu m

Ø Quantities have been increased using an additional 10 mm thickness of base for contingencies.

△ Computed at a rate of 2 322 kg/m^3 (Total mix aggregate and asphalt).

Tack is Subsidiary to the bid item "Hot Mix Asphalt Commercial Grade (Class A)"

Notes:

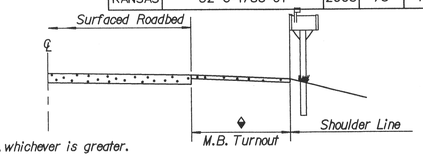
Asphalt Entrances Shall be 150 mm Hot Mix Asphalt - Commercial Grade (Class A).

Gravel Entrances Shall be 150 mm Surfacing Material (SA-1).

DRIVEWAYS

LOCATION	STATION	SIDE	TYPE	PHASE	HMA Comm. Grd. (Cl. A) (Mg) Ø	Surfacing Material (SA-1) (cu m)
155th Street	5+050	Rt.	Private	Phase I	42.35	
155th Street	5+086	Rt.	Private	Phase I	12.45	
Eisenhower Road	3+654	Rt.	Private	Phase I	3.90	5.3
Eisenhower Road	3+667	Rt.	Private	Phase I	3.90	9.5
Eisenhower Road	3+845	Rt.	Private	Phase I	5.15	10.8
Eisenhower Road	3+854	Rt.	Private	Phase I	5.25	7.8
Eisenhower Road	3+993	Rt.	Private	Phase I	6.20	
Eisenhower Road	4+006	Rt.	Private	Phase I	6.30	2.0
Eisenhower Road	4+044	Rt.	Private	Phase I	6.55	1.3
Eisenhower Road	4+108	Rt.	Private	Phase I	6.85	
Mt. Calvary Road	5+060	Rt.	Private	Phase I	7.10	1.7
Mt. Calvary Road	5+070	Rt.	Private	Phase I	7.30	5.9
			SUBTOTAL		113.30	44.3
Eisenhower Road	3+379	Lt.	Commercial	Phase II	17.90	
Eisenhower Road	3+873	Lt.	Private	Phase II	12.25	9.3
Eisenhower Road	4+119	Lt.	Private	Phase II	15.65	9.6
Eisenhower Road	4+430	Lt.	Private	Phase II	13.60	1.6
Eisenhower Road	4+516	Lt.	Commercial	Phase II	29.05	
Eisenhower Road	4+583	Lt.	Commercial	Phase II	29.00	
Eisenhower Road	4+625	Lt.	Private	Phase II	13.60	1.0
Eisenhower Road	4+685	Lt.	Private	Phase II	13.60	2.8
			SUBTOTAL		144.65	24.3
			TOTAL		258	68.6

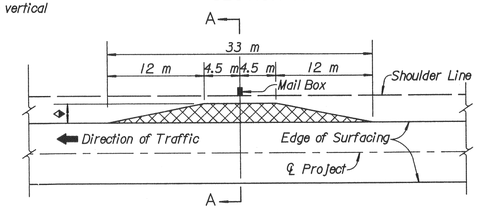
Note: For projects with stabilized shoulders, the face of the Mail Box to be in a vertical line with the top edge of the shoulder surfacing.



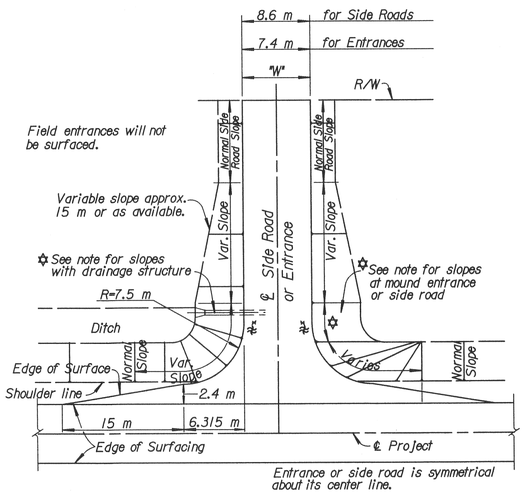
✦ Width shall be 2.4 m or shoulder width, whichever is greater.

SECTION A-A

Note: The face of Mail Box should be in a vertical line with the edge of the shoulder.



DETAIL FOR SURFACING OF MAIL BOX TURNOUTS



FLARE OF SHOULDERS AT ENTRANCES AND SIDE ROADS

✡ Dimensions for mound entrances or sideroads and those with drainage structures shall be similar with the exception of side slopes within the project clear zone.
These slopes shall be as follows:
Normal Slope (but not steeper than 1:6 at approximate ℄ of structure or appropriate clear zone width for entrances or sideroads containing drainage structures.
1 : 8 Slope at the appropriate clear zone shall apply to all mound entrances and mound side roads to 3 m fill height.
Normal Slope (but not steeper than 1:6) over 3 m fill height.

✱ On side roads and entrances which slope toward the highway, a low point approx. 150 mm deep shall be constructed to divert surface drainage into the highway ditch, unless otherwise shown on the plans.

RATES OF APPLICATION

RATE	UNIT	ITEM		

† Computed at the rate of

†† Computed at the rate of

RECAPITULATION OF QUANTITIES

ITEM				TOTAL	UNIT
† Hot Mix Asphalt - Commercial Grade (Class A)				2 777	Mg
Surfacing Material (SA-1)				69	cu m

† Quantities have been increased 10% for contingencies.

NO.	DATE	REVISIONS	BY	APP'D.
4	6-12-02	Added low point off shoulder.	S.W.K.	J.O.B.
3	2- 1-01	Revised shoulder rumble strip note	R.J.S.	J.O.B.
2	12-26-96	Rev. units for tack rate	R.J.S.	J.O.B.

KANSAS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (Surfacing)

RD940 SI

FHWA APPROVAL	8-7-02	APP'D James O. Brewer	
DESIGNED	DETAILED	QUANTITIES	TRACED B.N.B.
DESIGN CK.	DETAIL CK.	QUAN.CK.	TRACE CK. R.J.S.

DATE	BY
9-01	M Adams
11-01	R Stegman

REFERENCES NOTED
REFERENCES CHECKED

Plotted : 6/14/2004
Drawn By : Iward_CivilPak
File : p:\01541\01541 rd940si.dgn
Section : $$$$KDOTGRP$$$$