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Kp —
SECTION LEADER —

83-01
(Harris)

Overlay Projects:

This was approval by Comm.
11/12/96 - Proceed with this *
as practical to phase in to
Project Lettings

2' wide, ± 3 " in depth, both sides ON ROADWAY

\$18,000 to \$20,000 PER MILE (2 LANE ROADWAY)

RECEIVED

NOV 13 1996

ROADWAY DESIGN NEW CONSTRUCTION:

WENDEL ADVISED ON 11/12/96 THAT THEY WILL NOT BE ABLE TO ADD THE ADDITIONAL PAVEMENT WIDTH ON ALL PROJECTS SCHEDULED TO BE LET IN JANUARY. IF THE DECISION IS MADE TODAY TO ADD THE ADDITIONAL PAVEMENT, THEY WILL
(PICK & CHOOSE WHAT CAN BE REVISED)
GET READY FOR JANUARY LETTING. THEY WILL DEFINITELY BE READY BY FEB. LETTING.
WE MAY NEED TO CONSIDER A SUP. AGREEMENT FOR PROJECTS LET IN JAN. THAT DO NOT HAVE ADDITIONAL PAVEMENT.

SEE ATTACHED COPY OF LETTER REGARDING COST OF ADDITIONAL PAVEMENT ON NEW CONSTRUCTION.

KP

Zack Stewart
Northern District Commissioner

Wynne O. Burkes
Central District Commissioner

Ronnie Shows
Southern District Commissioner



Dr. Robert L. Robinson
Executive Director

Kenneth I. Warren
Deputy Executive Director/
Chief Engineer

Mississippi Department of Transportation / P.O. Box 1850 / Jackson, Mississippi 39215-1850 / FAX (601) 359-7110

September 27, 1996

MEMORANDUM

TO: Mr. Kenneth I. Warren
Chief Engineer

FROM: Mr. Wendell T. Ruff
Roadway Design Division Engineer

RE: Additional costs for 28-foot asphalt pavement

It has been requested that Roadway Design Division explore the financial burden of requiring additional two-foot full-depth paved shoulders at both pavement edges on all new asphalt pavements.

It is assumed that the additional four feet of pavement will decrease, by the same amount, the width of the graded shoulder that is required. Therefore the additional costs required would be equal to 4/24ths, or 16.6%, of mainline pavement costs, minus the cost for granular material previously required for the same area. It may be important to note that thicker pavement or higher specifications for paving materials will proportionally increase the cost for the extra width pavement. However, based on normal pavement thicknesses and anticipated prices, the additional cost should average between \$35,000 and \$40,000 per two-lane mile of new asphalt pavement. The breakdown of the cost analysis is shown on the attachment.

Should additional information be deemed necessary, please advise.

Attachment

pc: Roadway Design (Purvis, French)
Central Files



ESTIMATE OF ADDITIONAL COSTS FOR 28-FOOT ASPHALT PAVEMENTS

TYPICAL SECTION

All estimates contained in this analysis were based on the following typical section:

- 1.5" Surface Course
- 3.0" Binder Course
- 4.0" Bituminous Base Course
- 6.0" Lime Fly-Ash Granular Material (9/C)
- 7.0" Granular Material (9/C)

QUANTITIES

Additional paving quantities required for one mile of 28-foot pavement, based on the above typical section, are as follows:

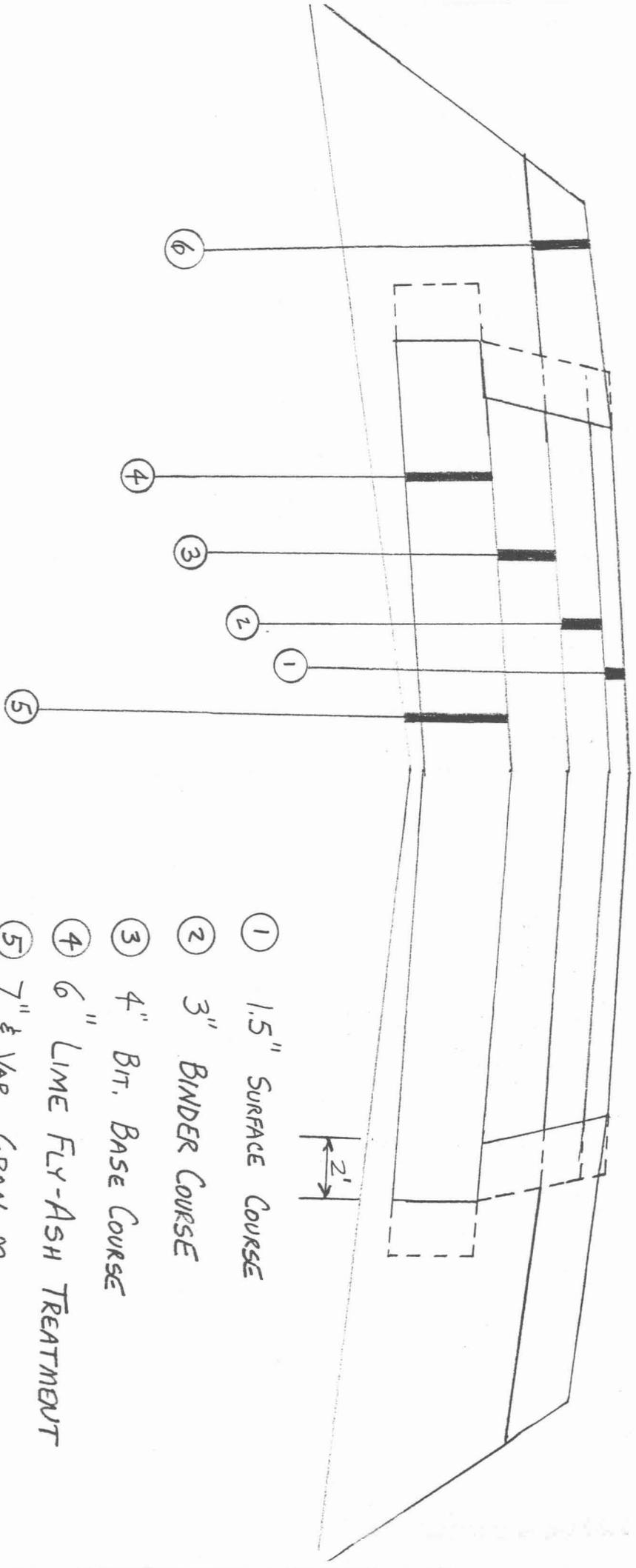
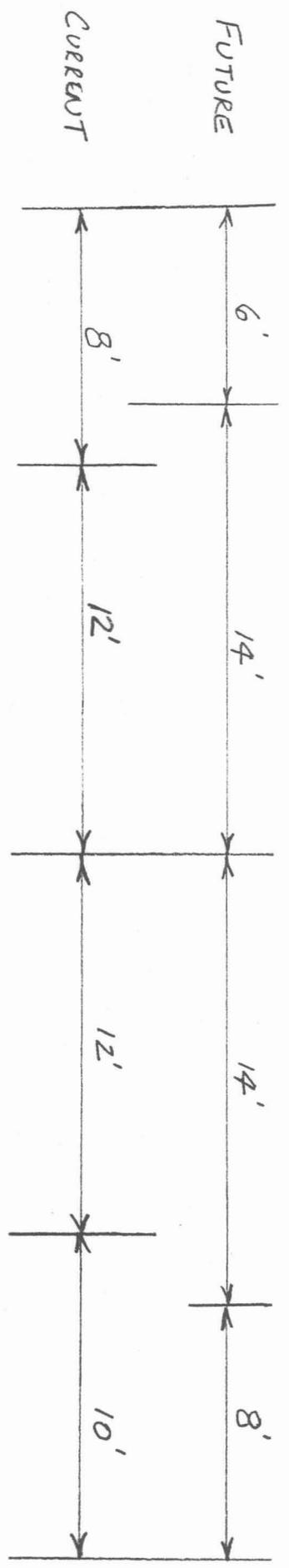
Surface Course	194 Tons
Binder Course	387 Tons
Bituminous Base	516 Tons
Hydrated Lime	24 Tons
Fly-Ash	72 Tons
Soil Lime Water Mixing	2346 S.Y.
Shoulder Gran. Matl. *	(554 C.Y.)

* This amount of granular material may be deducted when constructing 28-foot pavements

PRICES

Based on historical data, the following prices for paving materials are anticipated:

Surface Course (Ton)	\$34.00 - \$36.00
Binder Course (Ton)	\$32.50 - \$34.50
Bituminous Base (Ton)	\$31.00 - \$33.00
Hydrated Lime (Ton)	\$90.00 - \$90.00
Fly-Ash (Ton)	\$48.00 - \$48.00
Soil Lime Water Mixing (S.Y.)	\$1.00 - \$ 1.00
Shoulder Gran. Matl. * (C.Y.)	\$11.00 - \$11.00



- ① 1.5" SURFACE COURSE
- ② 3" BINDER COURSE
- ③ 4" BIT. BASE COURSE
- ④ 6" LIME FLY-ASH TREATMENT
- ⑤ 7" ϕ VAR. GRAN. MATL
- ⑥ 4.5" ϕ VAR. GRAN. MATL