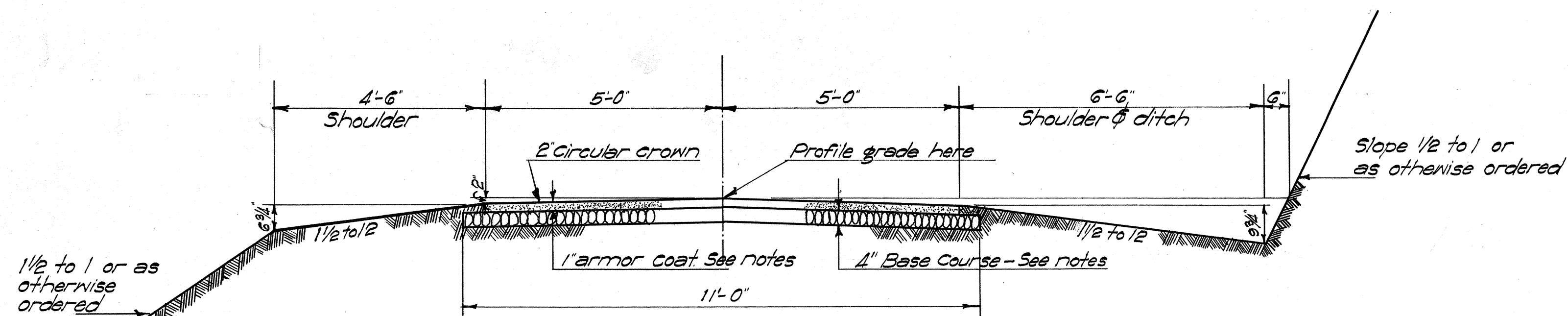


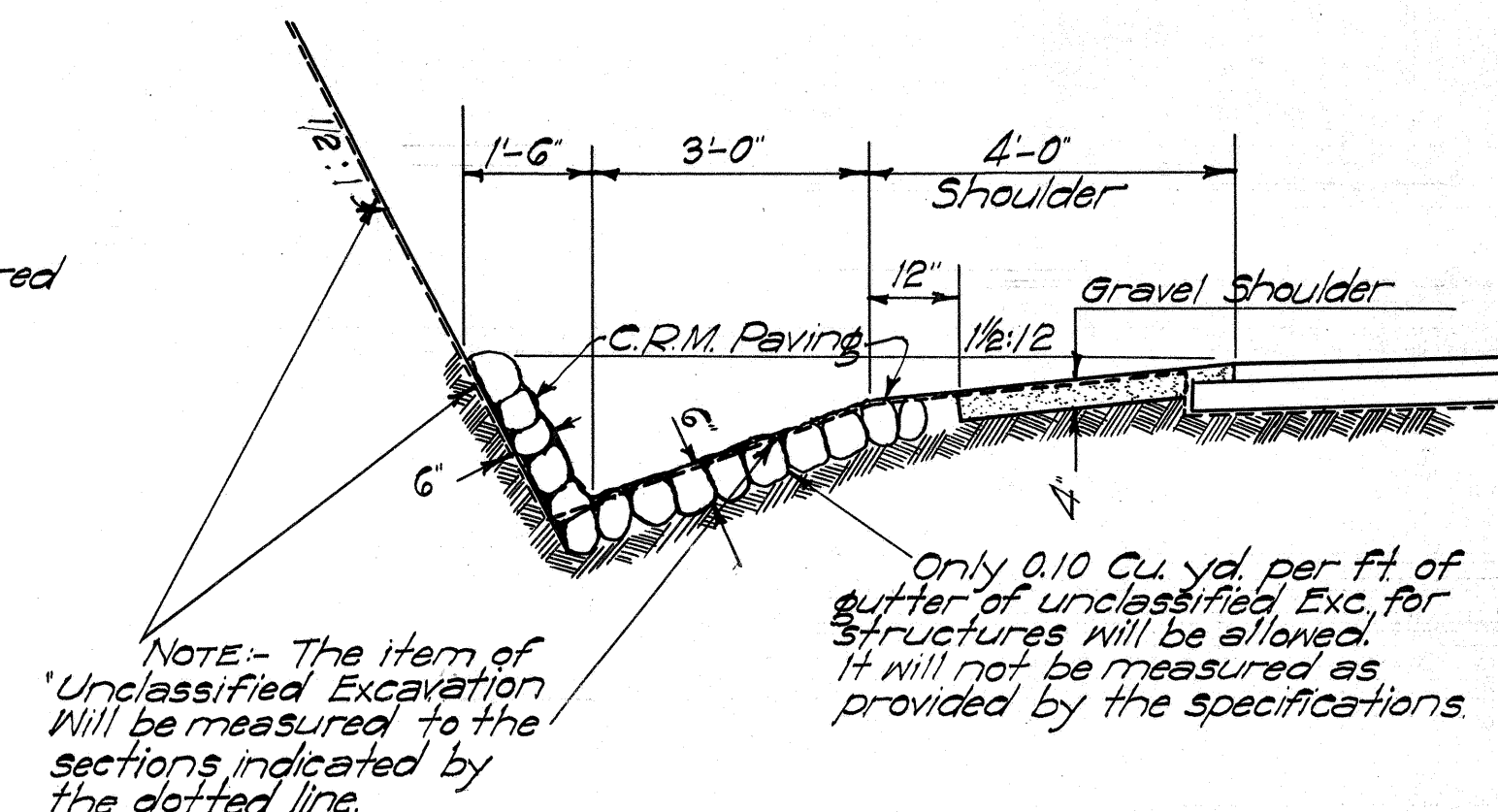
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	HAW	11-B	1993	2	50

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	HAW	NRH 11-C	1993	2	28



TYPICAL ROAD SECTION ON TANGENTS

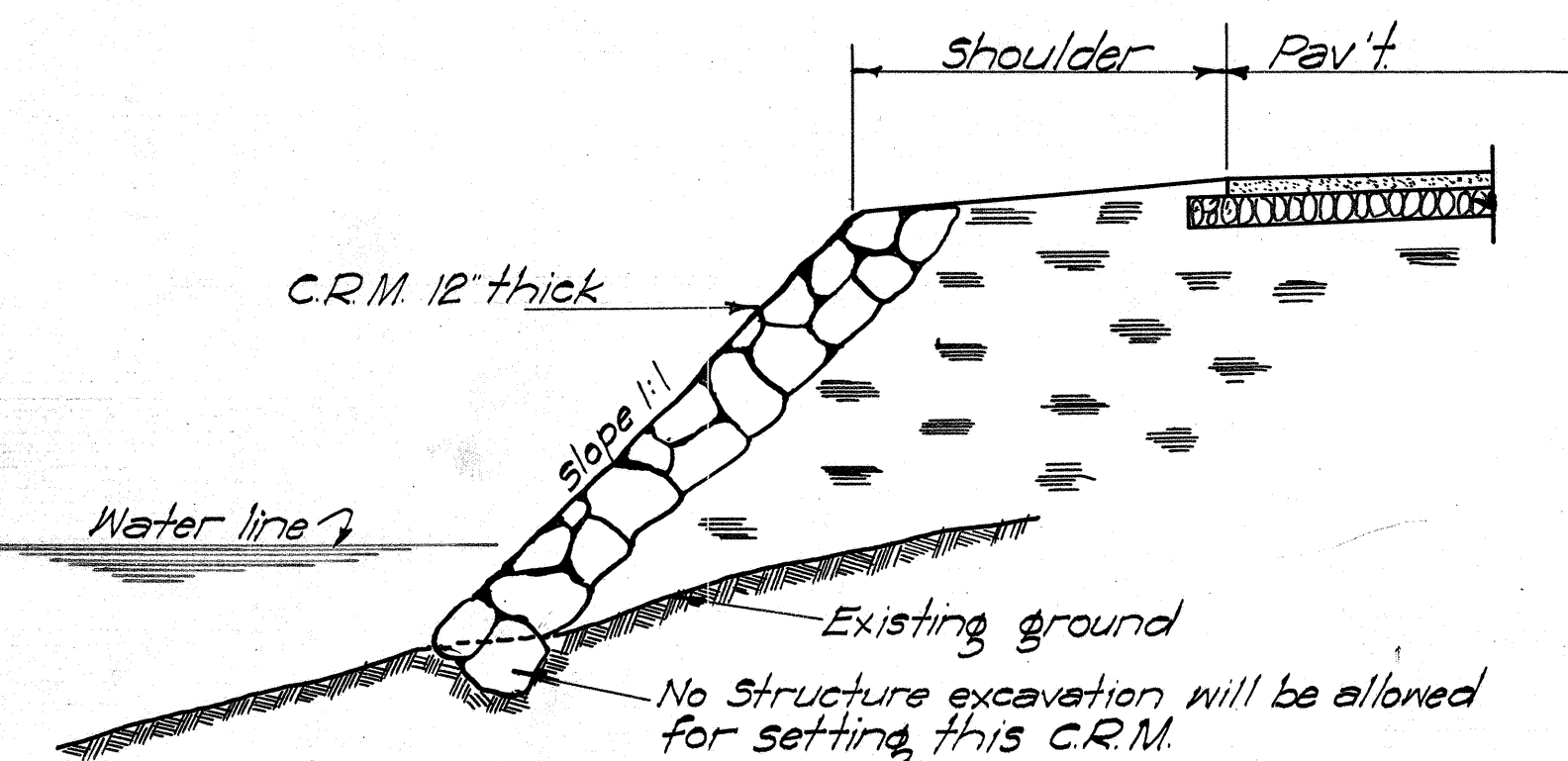
ALSO USED ON CURVES WITH NO SUPERELEVATION OR EXTRA WIDTH



DETAIL OF "B" SECTION GUTTER

Scale 1/2" = 1'-0"

TO BE USED INSTEAD OF STD GUTTER SECTION WHEN SHOWN ON PLANS OR AS REQUIRED



DETAIL OF C.R.M. SEA WALL

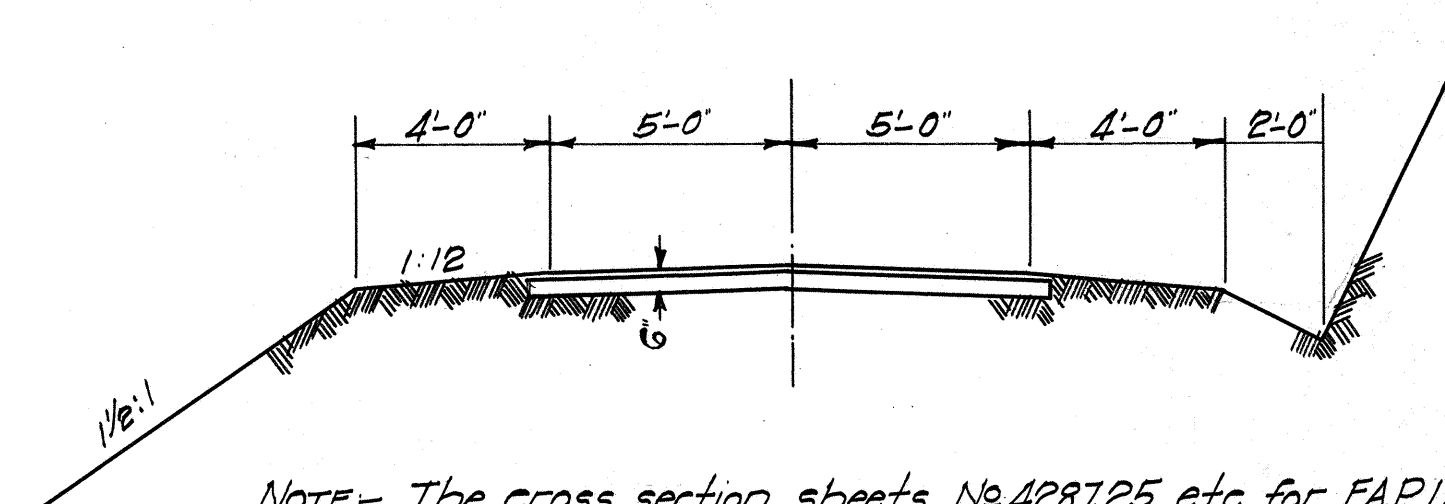
Scale 1/2" = 1'-0"

NOTE TO RESIDENT ENGINEER 11B-

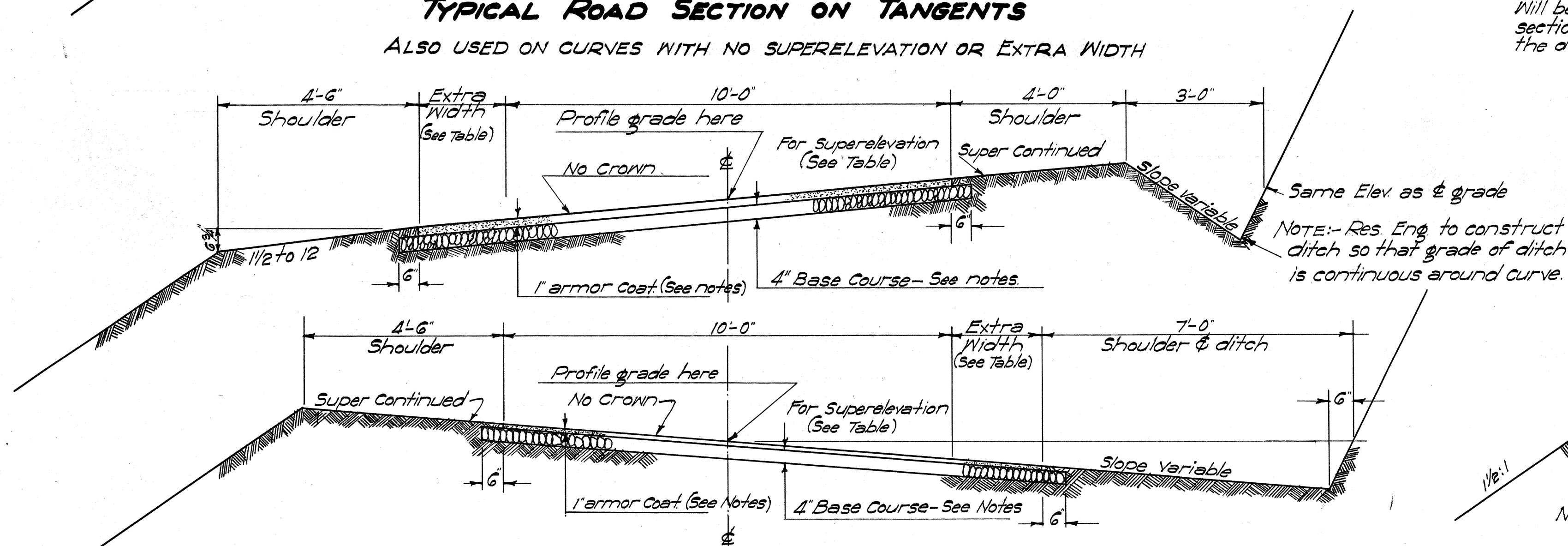
The following is the estimated change in quantities due to change in section. Sectional end areas in cut diminish 0.12 sq ft for shoulders and ditches and increase 0.25 sq ft per foot in height of back slope. Sectional end areas in fill diminish 0.38 sq ft for shoulders and increase 0.17 sq ft per foot in height of fill slope. These figures are for tangent sections only. Superelevated sections vary slightly from these figures.

$43,509 \times 0.25 \times 7 = 76,140.75$ c.f. Increase in excavation.
 $43,509 \times 0.12 = 5,221.08$ c.f. decrease in excavation.
 $70,919.67$ c.f. or $2,626.7$ cy. net increase in excavation.
 $26,491 \times 0.17 \times 10 = 45,034.70$ c.f. increase in embankment.
 $26,491 \times 0.38 = 10,066.58$ c.f. decrease in embankment.
 $34,968.12$ c.f. or $1,295.1$ cy. net increase in embankment.

Resident Engineer to raise and lower grades to bring the quantities of excavation and embankment using new sections as near to original quantities as possible.



NOTE - The cross section sheets No 4287.25 etc. for F.A.P. 11B & 4293.15 etc. for N.R.H. 11-C, are templated to the above typical section and the quantities shown on these sections and on the profiles correspond therewith. The small changes in quantity involved by the use of the typical section required will be adjusted in the measurements for payment.



TYPICAL ROAD SECTION ON CURVES

WITH SUPERELEVATION & EXTRA WIDTH

Scale 1/2" = 1'-0"

NOTES ON BASE COURSE & SURFACE COURSE

BASE COURSE:-

The 4" base course shall be either a "Crusher Run Base Course" or a "Macadam Base Course"; these being as noted below.
CRUSHER RUN BASE COURSE: 4" (compacted or finished thickness) of crusher run material (20% wear).

MACADAM BASE COURSE: 4" (compacted or finished thickness) of No 1 crushed rock (3 1/2" to 1 1/4") fully filled & bound together with No 45 crushed rock (3/4" to 1/2") rock to have not over 12% wear.

SURFACE COURSE:-

The surface course shall be a one (1) inch Emulsified Asphalt Armor coat containing 1 1/2 to 1 1/4 gal per sq yds of Emulsified Asphalt and crushed rock (10% wear).

Particular reference is made to the specifications covering these items of work.

REVISIONS
 NO. DATE BY
 1 7/14/93 JCM
 2 8/4/93 WCV
 3 8/4/93 WCV
 4 8/4/93 WCV
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4293.2

4287.2