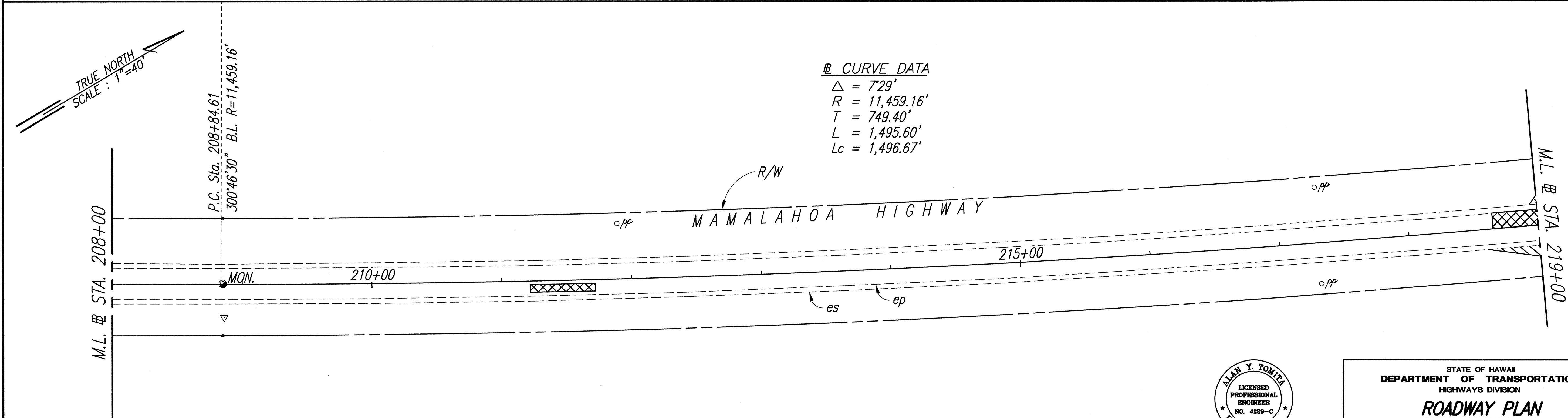
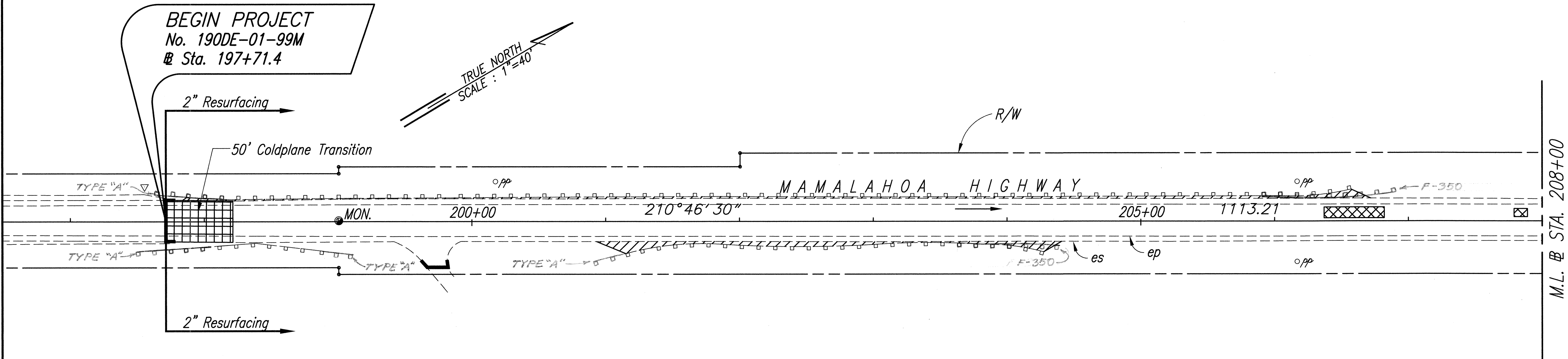


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	7	50



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	
	No.	



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Alan Y. Tomita

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

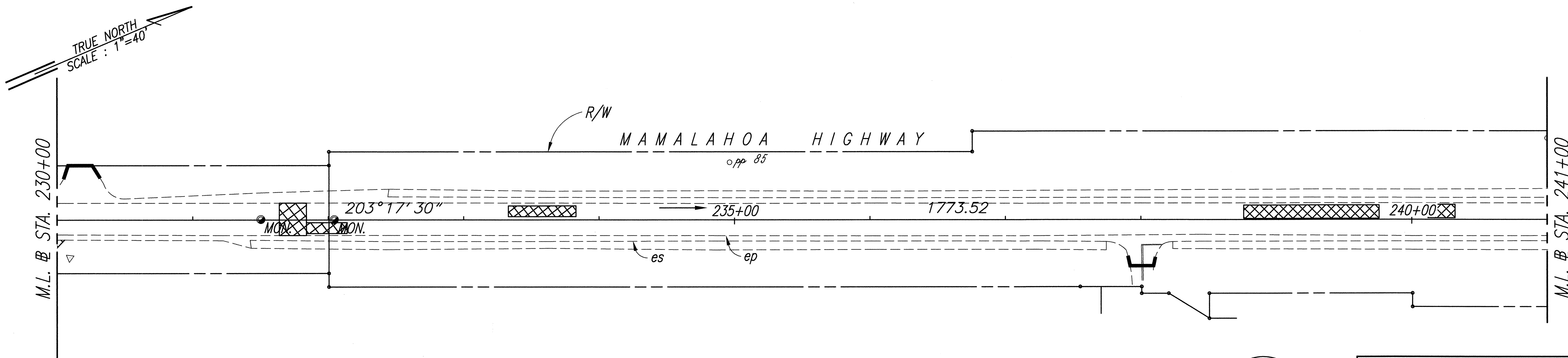
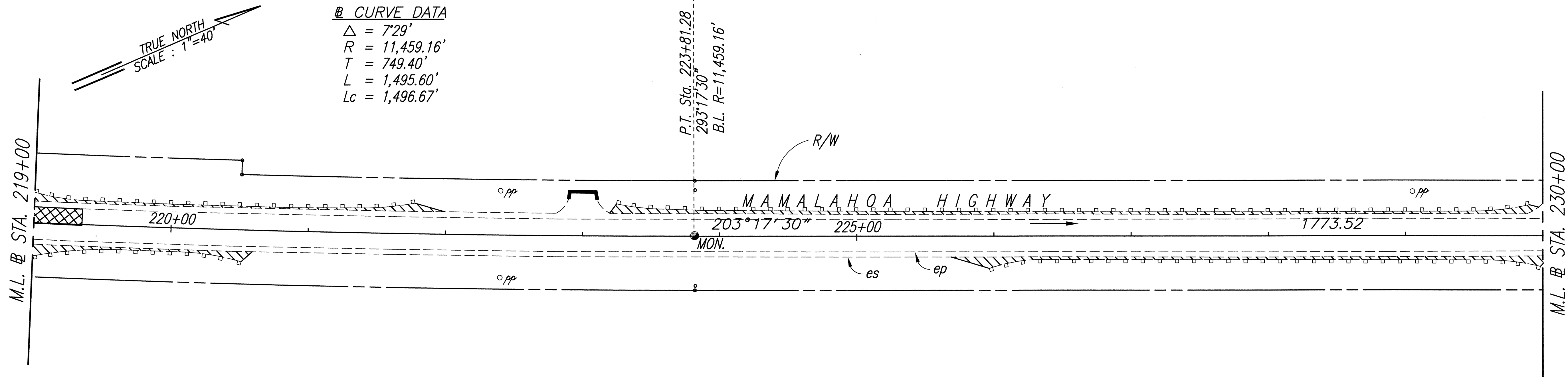
MAMALAHOA HIGHWAY RESURFACING
Vicinity of Kamakoa Bridge No. 1 to Keamoku
Project No. 190DE-01-99M

Scale: As Shown Date: May, 1999

SHEET No. 1 OF 13 SHEETS

"AC BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	8	50



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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	CHECKED BY	



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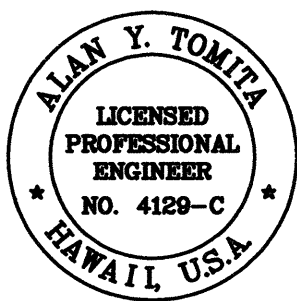
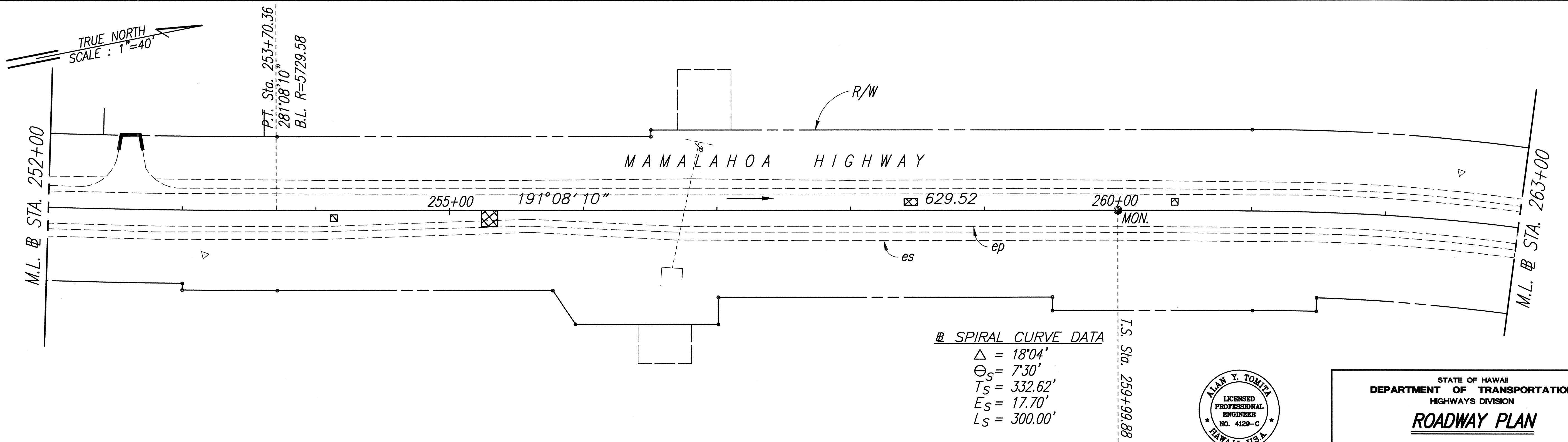
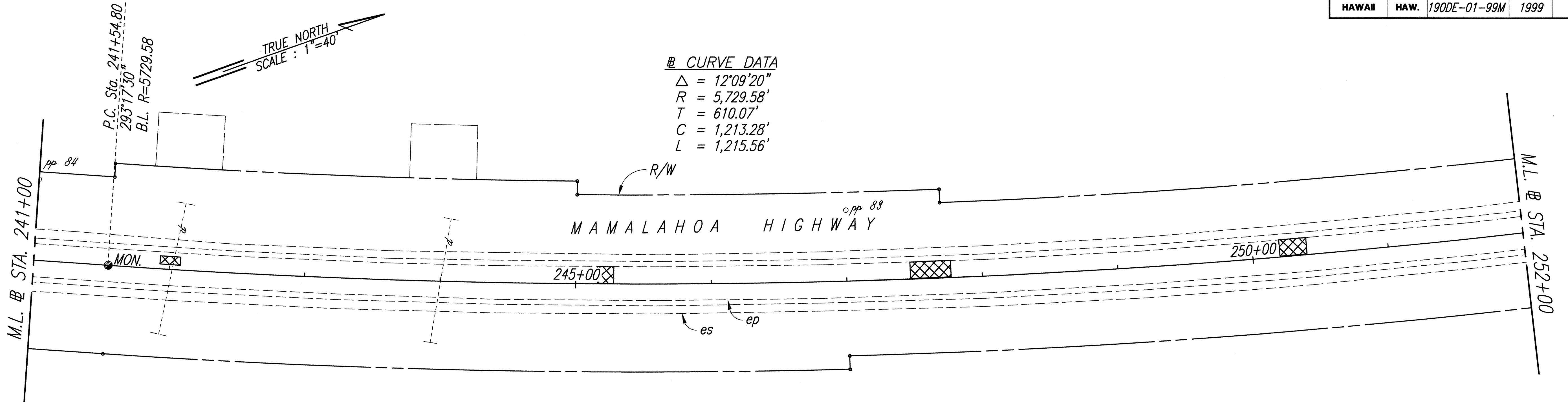
ROADWAY PLAN

MAMALAHOA HIGHWAY RESURFACING
Vicinity of Kamakoa Bridge No. 1 to Keamoku
Project No. 190DE-01-99M

Scale: As Shown Date: May, 1999

SHEET No. 2 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	9	50



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HIGHWAYS DIVISION

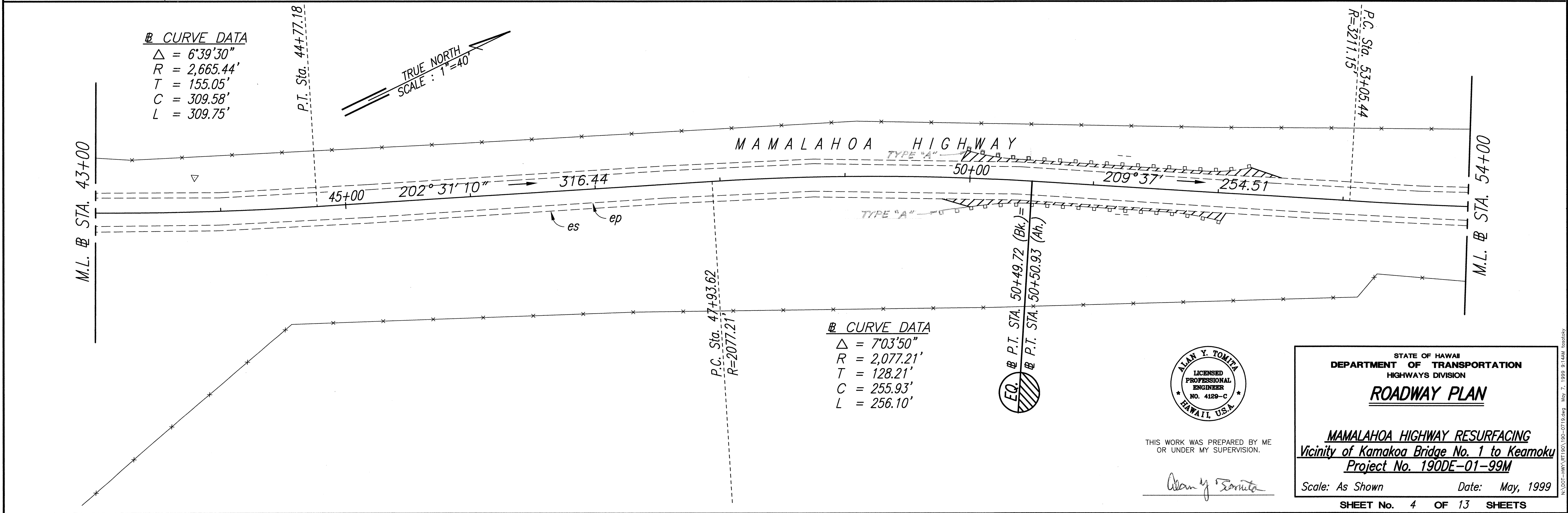
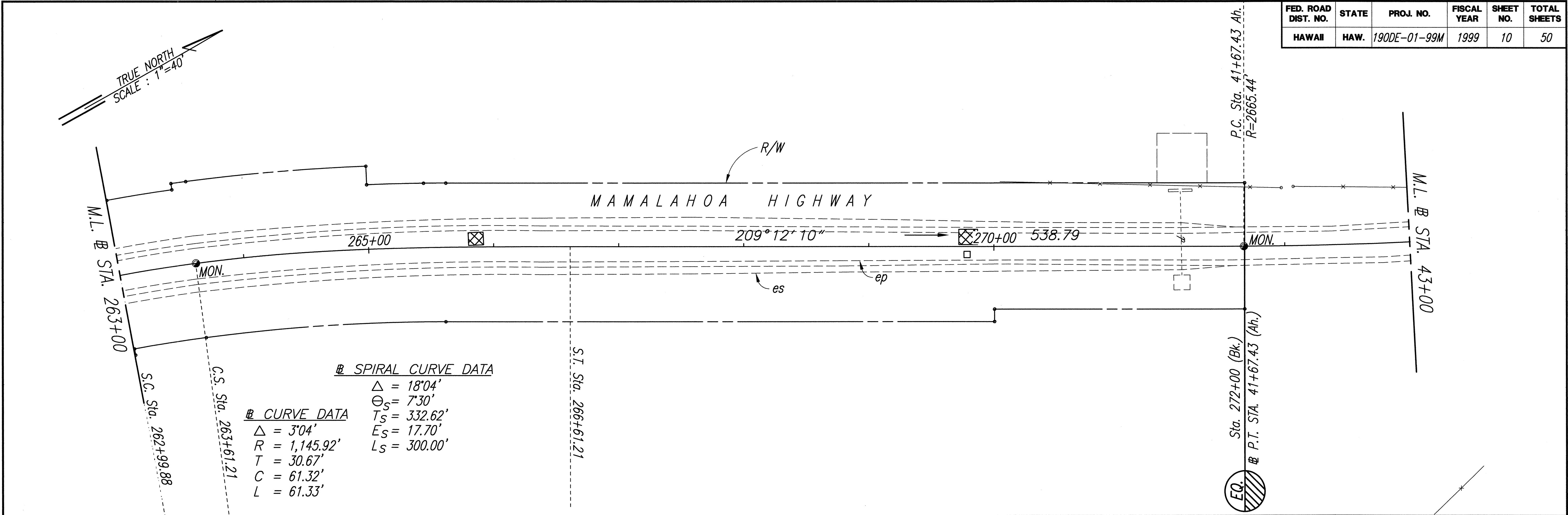
ROADWAY PLAN

MAMALAHOA HIGHWAY RESURFACING
Vicinity of Kamakoa Bridge No. 1 to Keamoku
Project No. 190DE-01-99M

Scale: As Shown Date: May, 1999

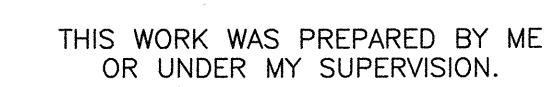
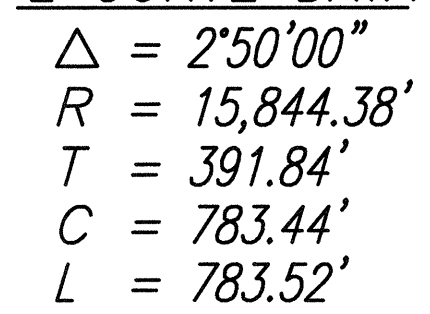
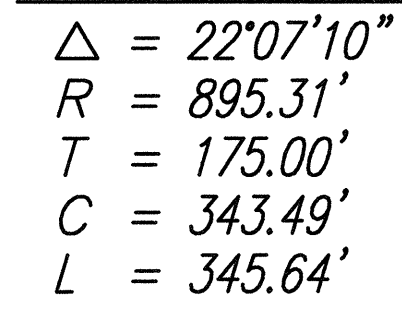
SHEET No. 3 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	10	50



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	
	No.	

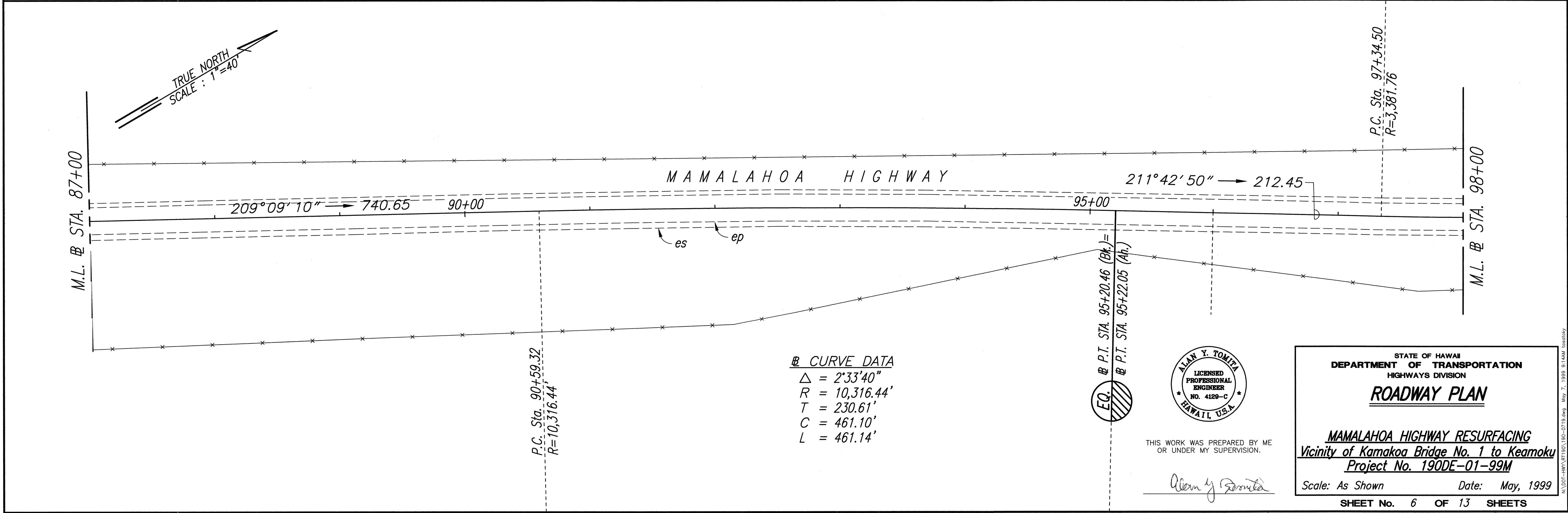
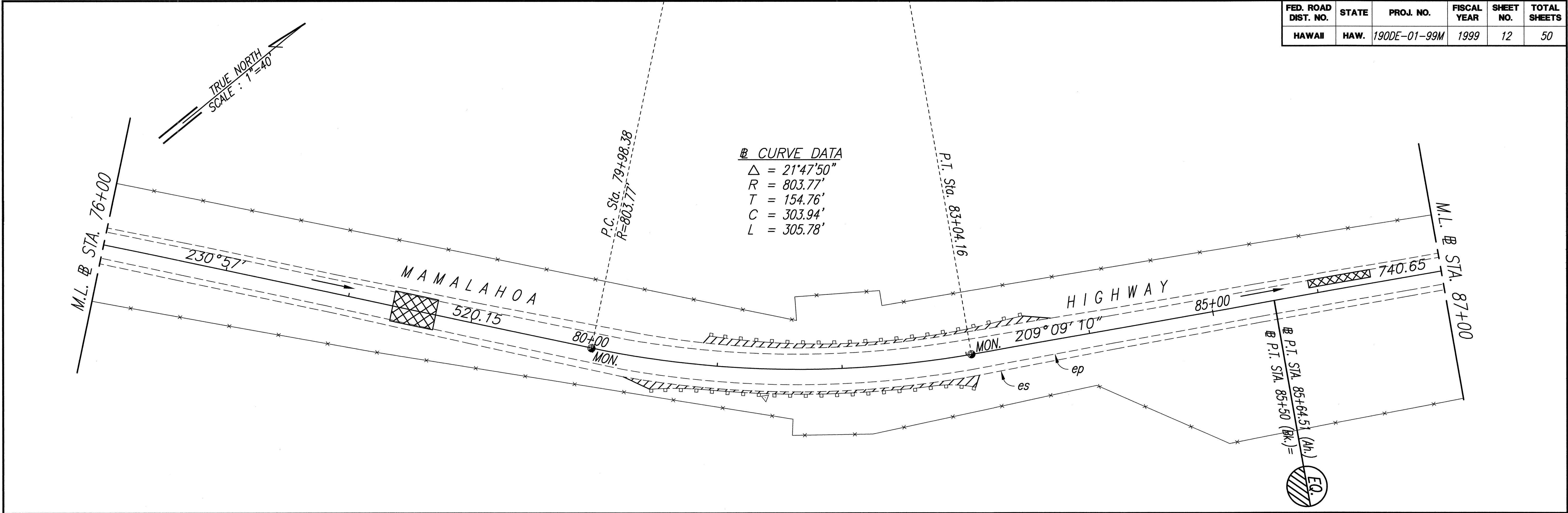
N:\DOT-HAWAII\190\190-0719.dwg F:\1 May 07 09:16:54 1999 K Tasato

$$\begin{aligned}\Delta &= 3^{\circ}37'10'' \\ R &= 3,211.15' \\ T &= 101.46' \\ C &= 202.82' \\ L &= 202.85'\end{aligned}$$


Alom y Sonita

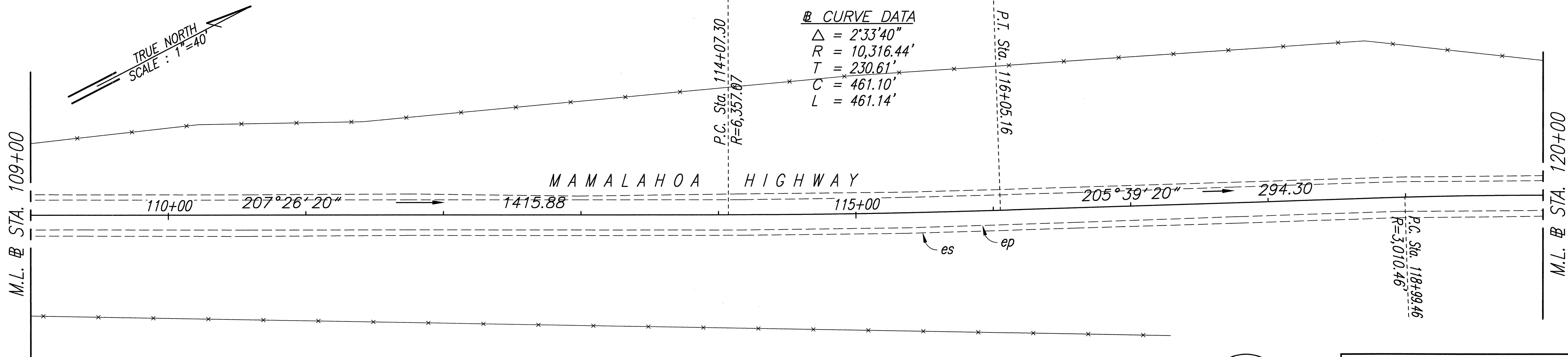
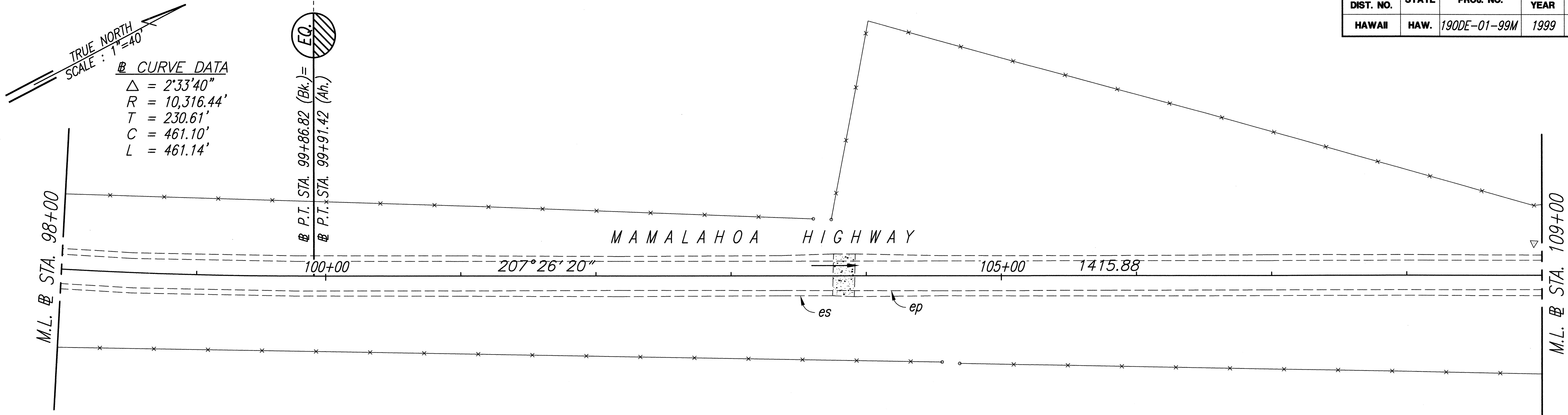
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
MAMALAHOA HIGHWAY RESURFACING
Vicinity of Kamakoa Bridge No. 1 to Keamoku
Project No. 190DE-01-99M
Scale: As Shown Date: May, 1999
SHEET No. 5 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	12	50



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	" "
	TRACED BY	" "
	DESIGNED BY	" "
	CHECKED BY	" "
		" "

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	13	50



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	CHECKED BY	
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Alan Y. Tomita

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN

MAMALAHOA HIGHWAY RESURFACING
Vicinity of Kamakoa Bridge No. 1 to Keamoku
Project No. 190DE-01-99M

Scale: As Shown Date: May, 1999

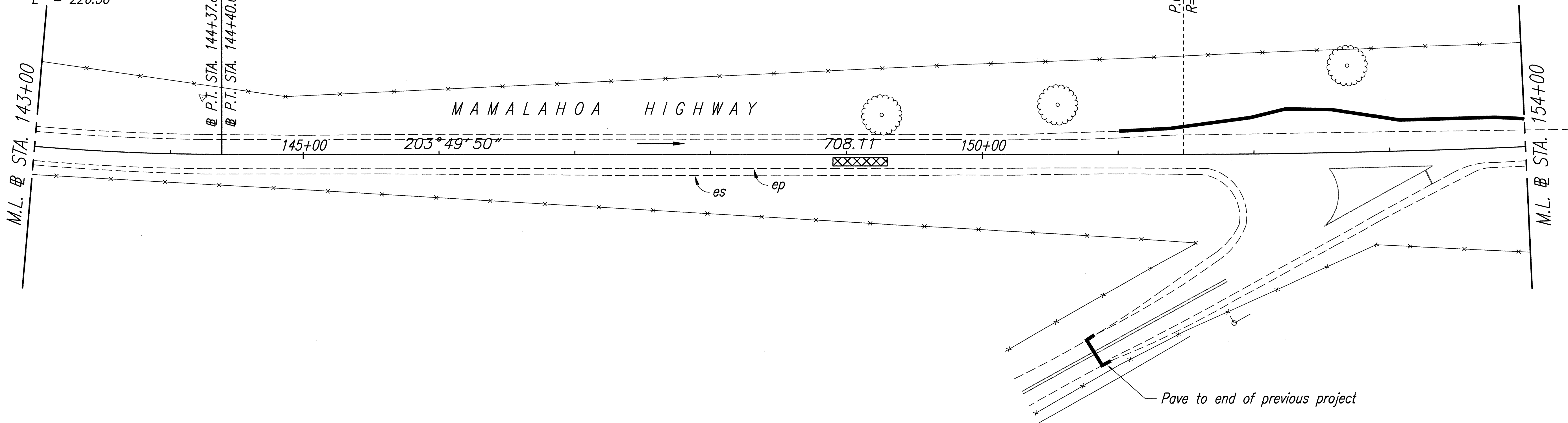
SHEET No. 7 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	15	50

Curve Data
 $\Delta = 8^{\circ}09'00''$
 $R = 1,592.31'$
 $T = 113.44'$
 $C = 226.31'$
 $L = 226.50'$

EQ.
P.T. STA. 144+37.85 (Bk.) =
P.T. STA. 144+40.00 (Ah.)

TRUE NORTH
SCALE: 1"=40'



TRUE NORTH
SCALE: 1"=40'

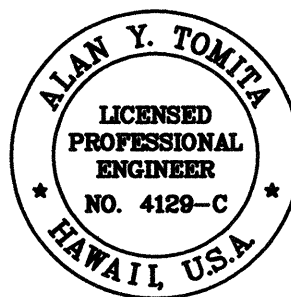
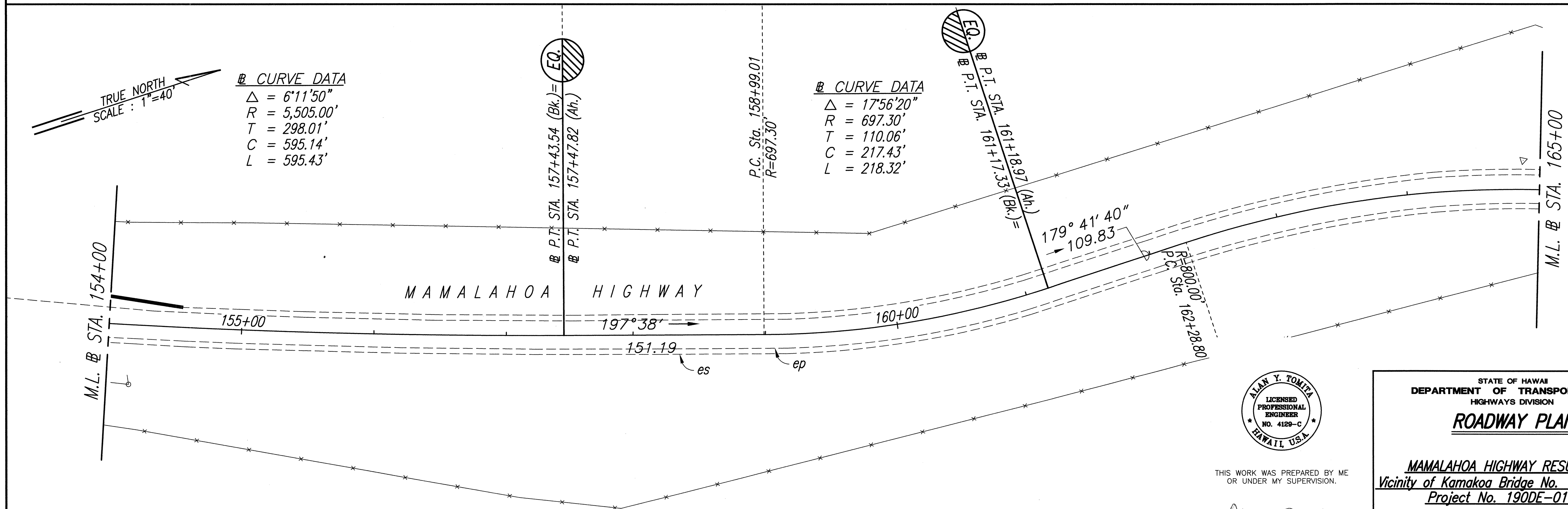
Curve Data
 $\Delta = 6^{\circ}11'50''$
 $R = 5,505.00'$
 $T = 298.01'$
 $C = 595.14'$
 $L = 595.43'$

EQ.
P.T. STA. 157+43.54 (Bk.) =
P.T. STA. 157+47.82 (Ah.)

P.C. Sta. 158+99.01
R=697.30'

Curve Data
 $\Delta = 17^{\circ}56'20''$
 $R = 697.30'$
 $T = 110.06'$
 $C = 217.43'$
 $L = 218.32'$

EQ.
P.T. STA. 161+18.97 (Ah.) =
P.T. STA. 161+17.33 (Bk.) =



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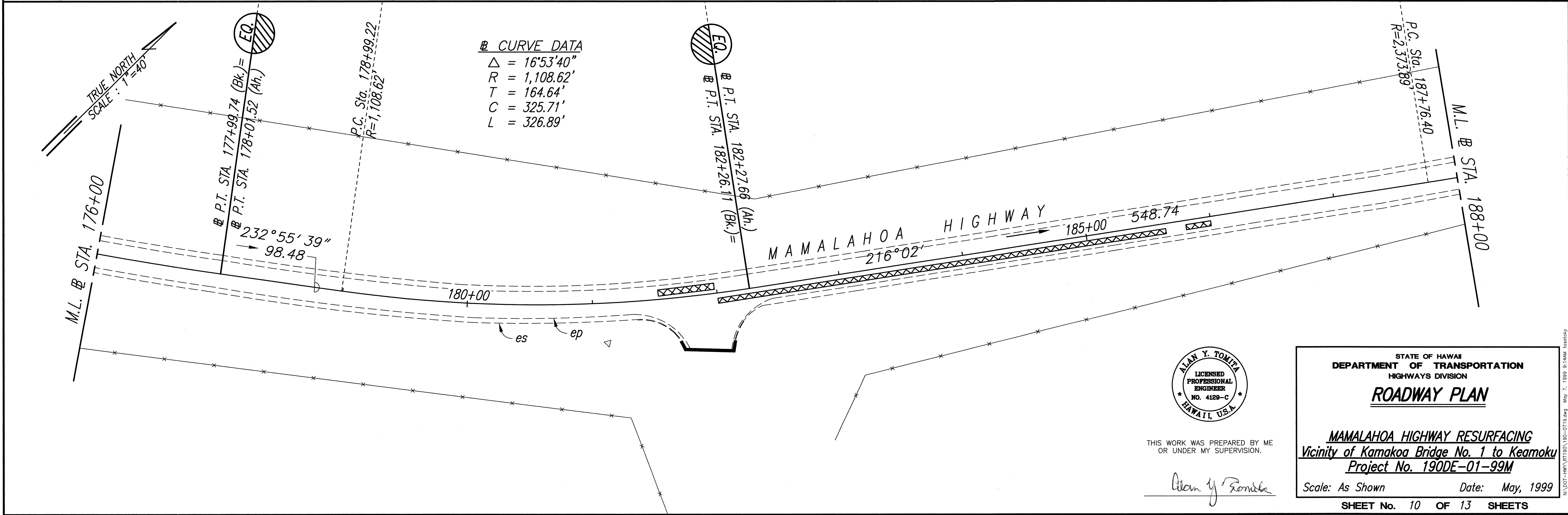
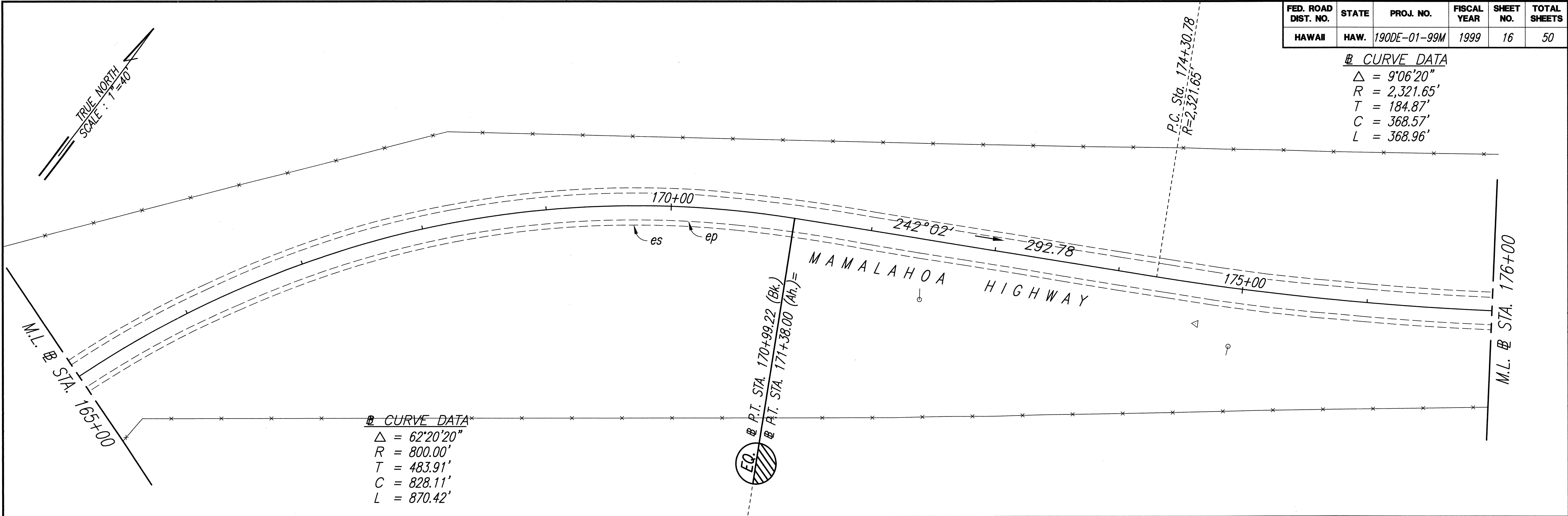
Alan Y. Tomita

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
MAMALAHOA HIGHWAY RESURFACING
Vicinity of Kamakoa Bridge No. 1 to Keamoku
Project No. 190DE-01-99M
Scale: As Shown Date: May, 1999
SHEET NO. 9 OF 13 SHEETS

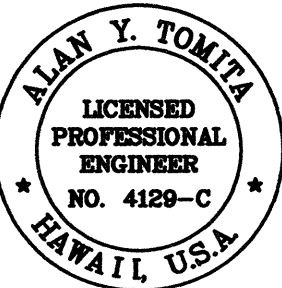
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	16	50

⊠ CURVE DATA

$\Delta = 9^{\circ}06'20''$
 $R = 2,321.65'$
 $T = 184.87'$
 $C = 368.57'$
 $L = 368.96'$



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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	CHECKED BY	



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN

MAMALAHOA HIGHWAY RESURFACING
Vicinity of Kamakoa Bridge No. 1 to Keamoku
Project No. 190DE-01-99M

Scale: As Shown Date: May, 1999

SHEET No. 10 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	17	50

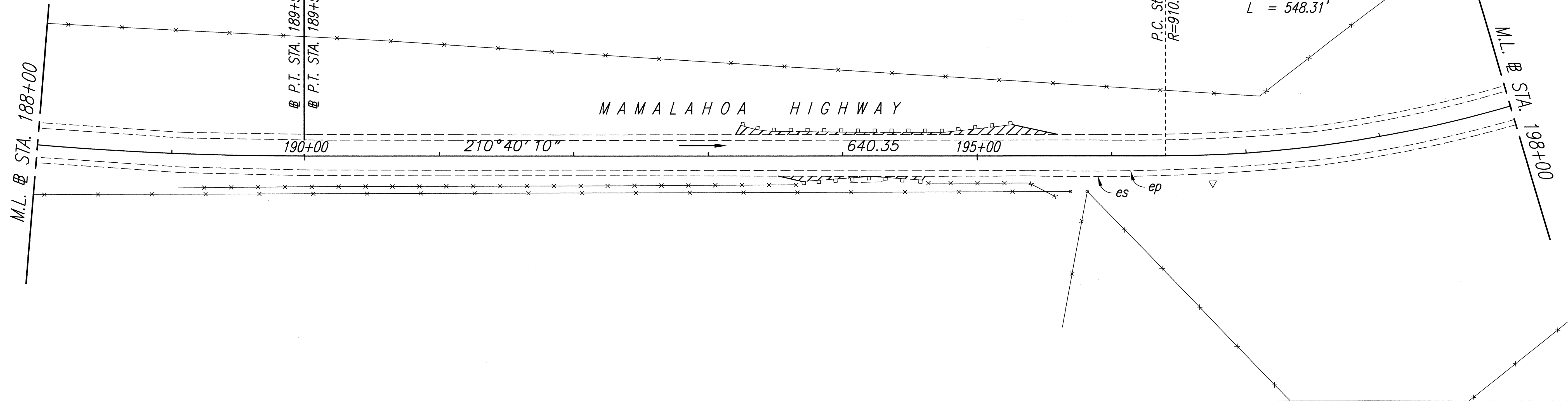
B CURVE DATA

$\Delta = 5^{\circ}21'50''$
 $R = 2,373.89'$
 $T = 111.20'$
 $C = 222.16'$
 $L = 222.24'$



P.T. STA. 189+98.64 (Bk.) =
P.T. STA. 189+99.73 (Ah.)

TRUE NORTH
SCALE : 1"=40'

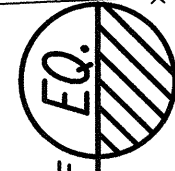


B CURVE DATA

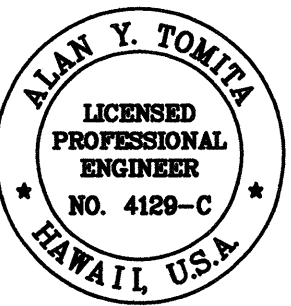
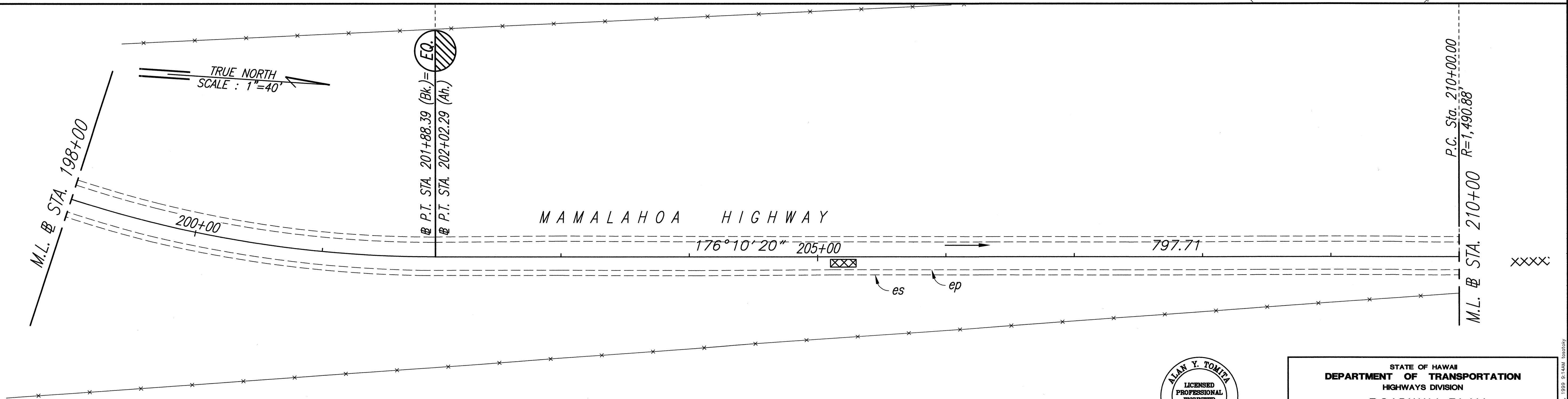
$\Delta = 34^{\circ}29'50''$
 $R = 910.68'$
 $T = 282.75'$
 $C = 540.07'$
 $L = 548.31'$

P.C. Sta. 196+40.08
R=910.68'

TRUE NORTH
SCALE : 1"=40'



P.T. STA. 201+88.39 (Bk.) =
P.T. STA. 202+02.29 (Ah.)



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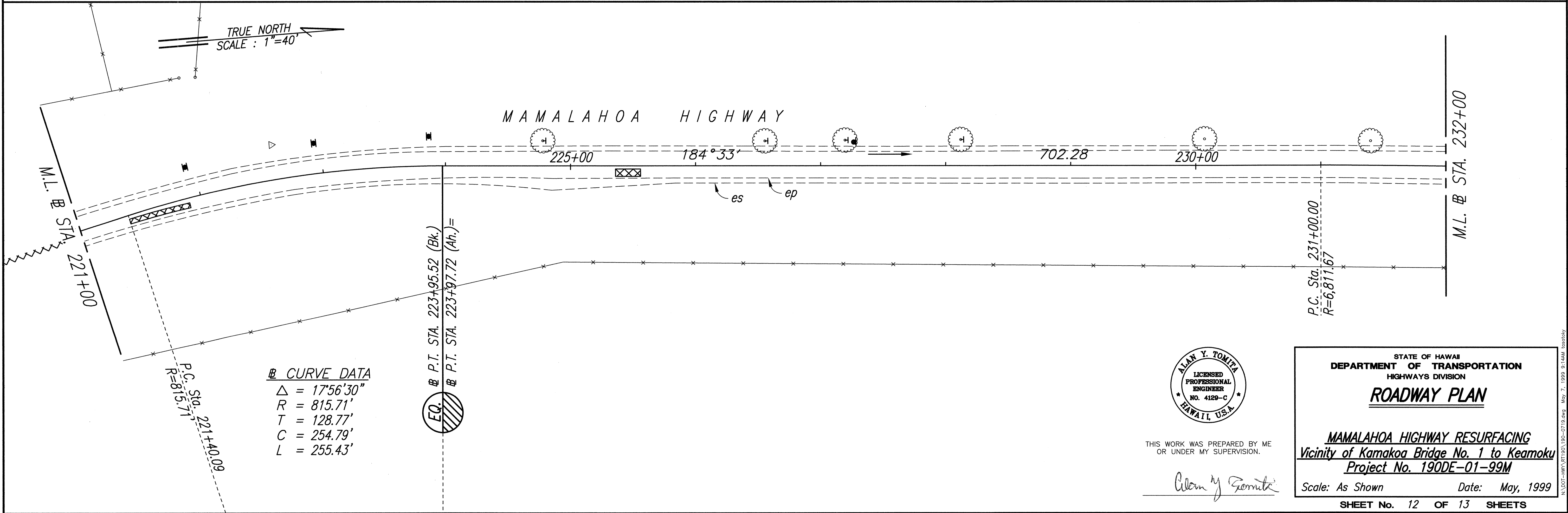
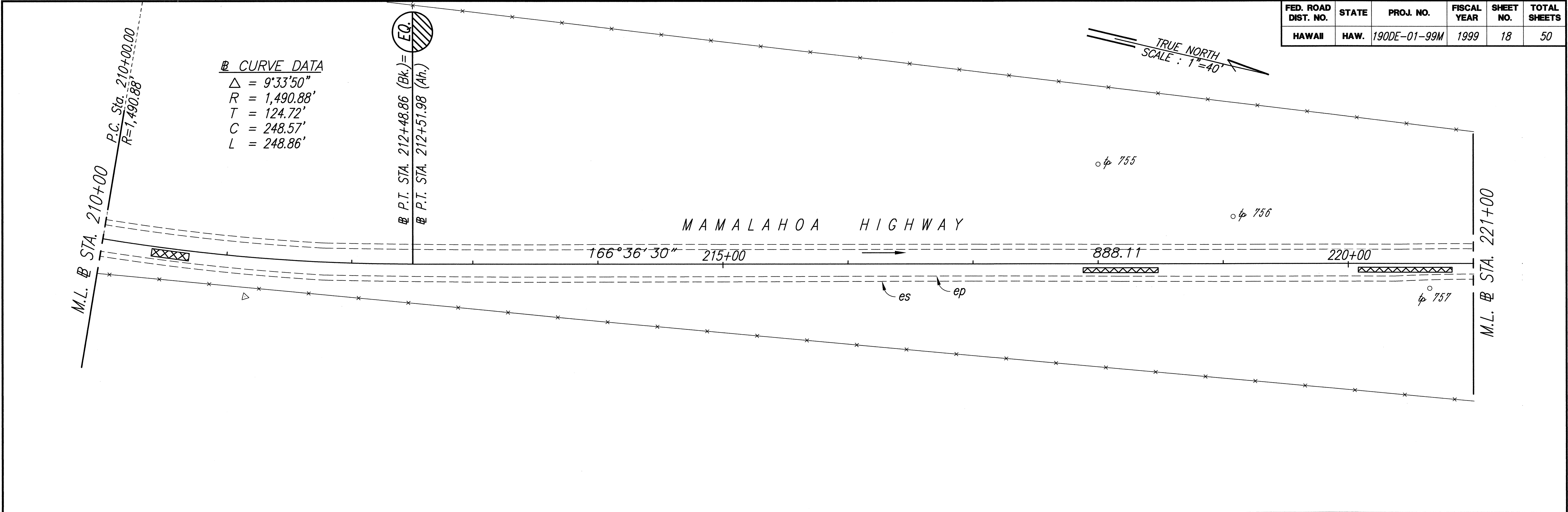
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN

MAMALAHOA HIGHWAY RESURFACING
Vicinity of Kamakoa Bridge No. 1 to Keamoku
Project No. 190DE-01-99M
Scale: As Shown Date: May, 1999
SHEET No. 11 OF 13 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	REVIEWED BY	
	QUANTITIES BY	
	CHECKED BY	

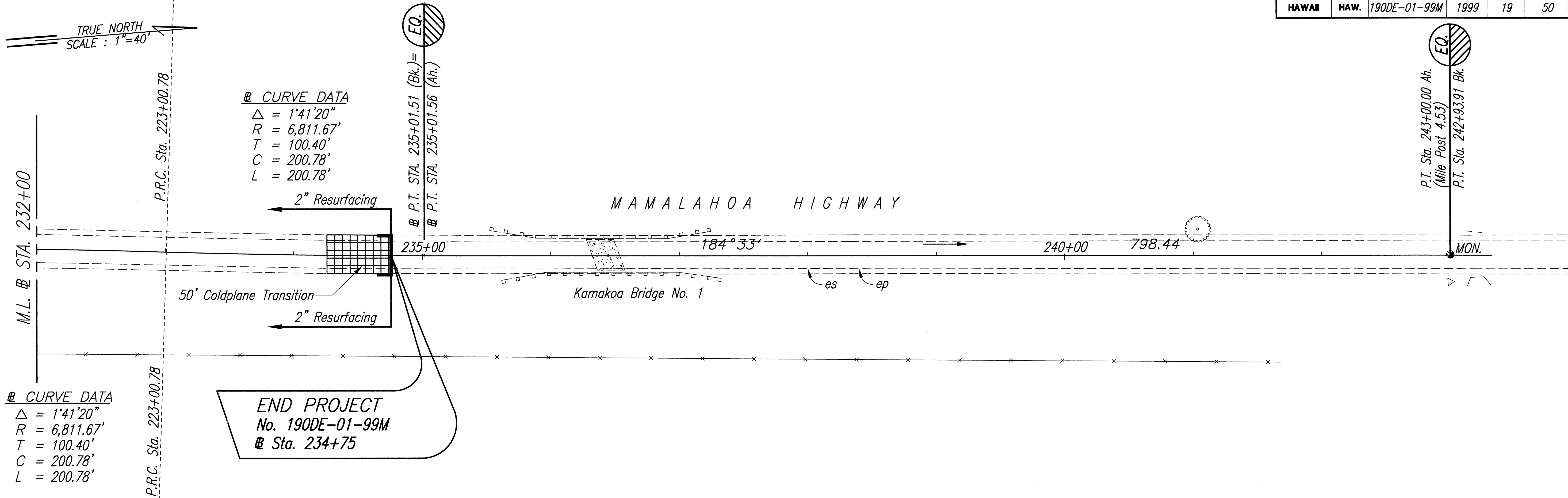
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	18	50



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ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
QUANTITIES BY	CHECKED BY	
No.		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190DE-01-99M	1999	19	50



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6/3/99	Added Text "Kamakoa Bridge No. 1" Near Roadway
Date	Revision

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
ROADWAY PLAN	
MAMALAHOA HIGHWAY RESURFACING Vicinity of Kamakoa Bridge No. 1 to Keamoku Project No. 190DE-01-99M	
Scale: As Shown	Date: June, 1999
SHEET No. 13 OF 13 SHEETS	

ADD. 19