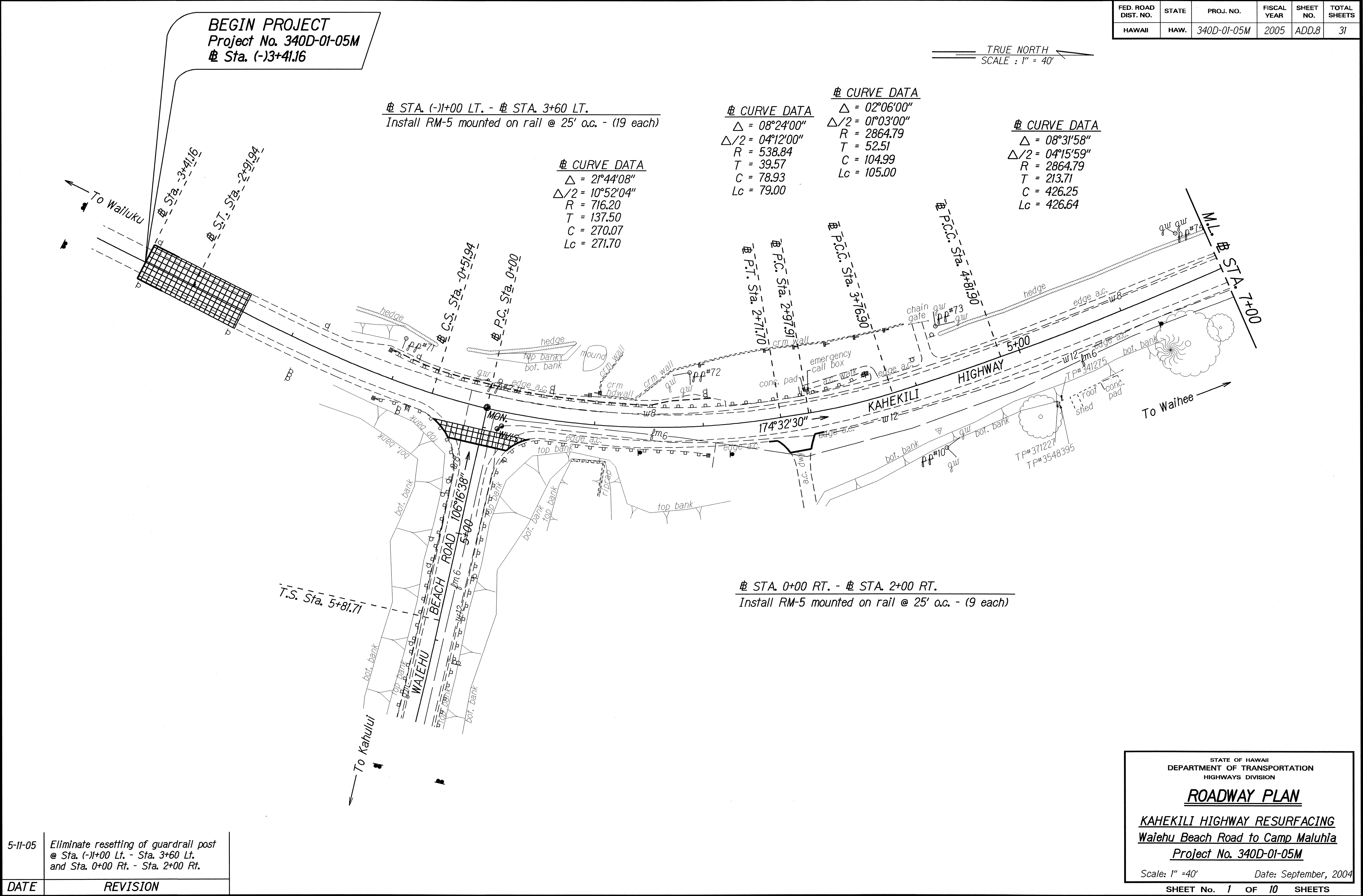
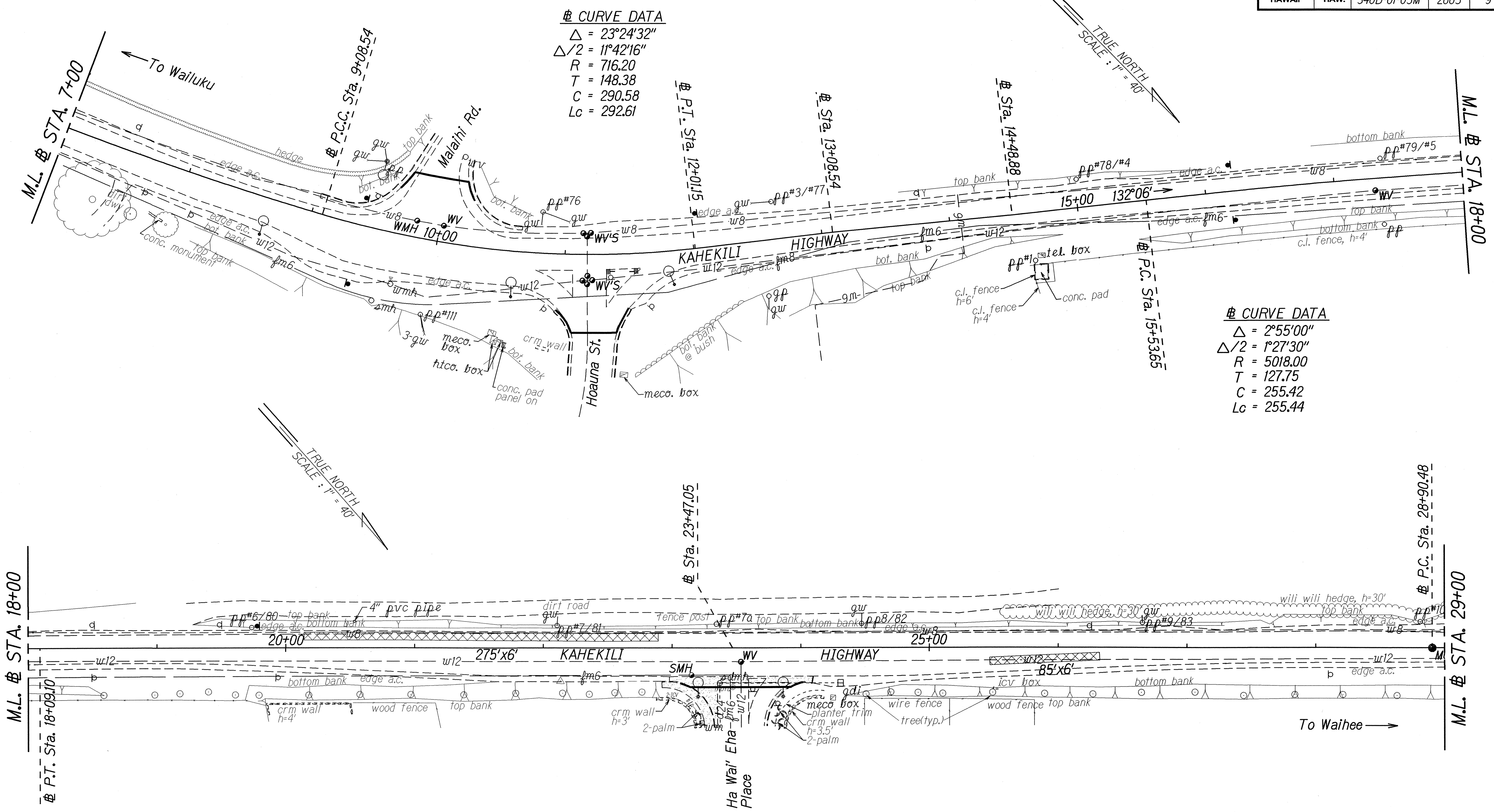


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	ADD.8	31



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	9	31



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	9/04
DESIGNED BY	TRACED BY	
QUANTITIES BY	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

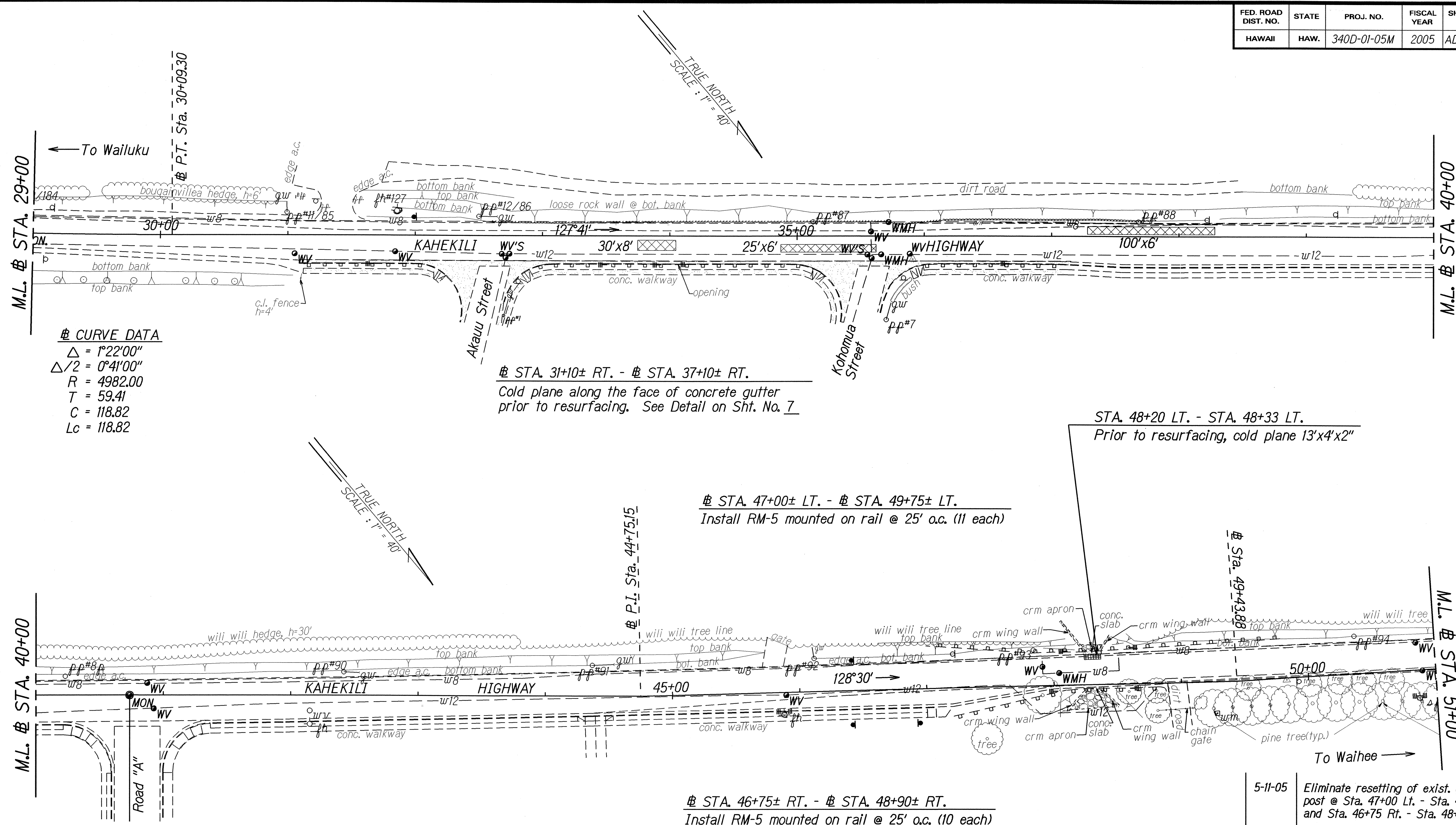
ROADWAY PLAN

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

Scale: 1" = 40' Date: September, 2004

SHEET No. 2 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	ADD.10	31



5-11-05 Eliminate resetting of exist. guardrail post @ Sta. 47+00 Lt. - Sta. 49+75 Lt. and Sta. 46+75 Rt. - Sta. 48+90 Rt.

Added cold planing the exist. pavement at Sta. 48+20 Lt. - Sta. 48+33 Lt.

<i>DATE</i>	<i>REVISION</i>
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

Scale: 1" = 40' Date: September, 2004

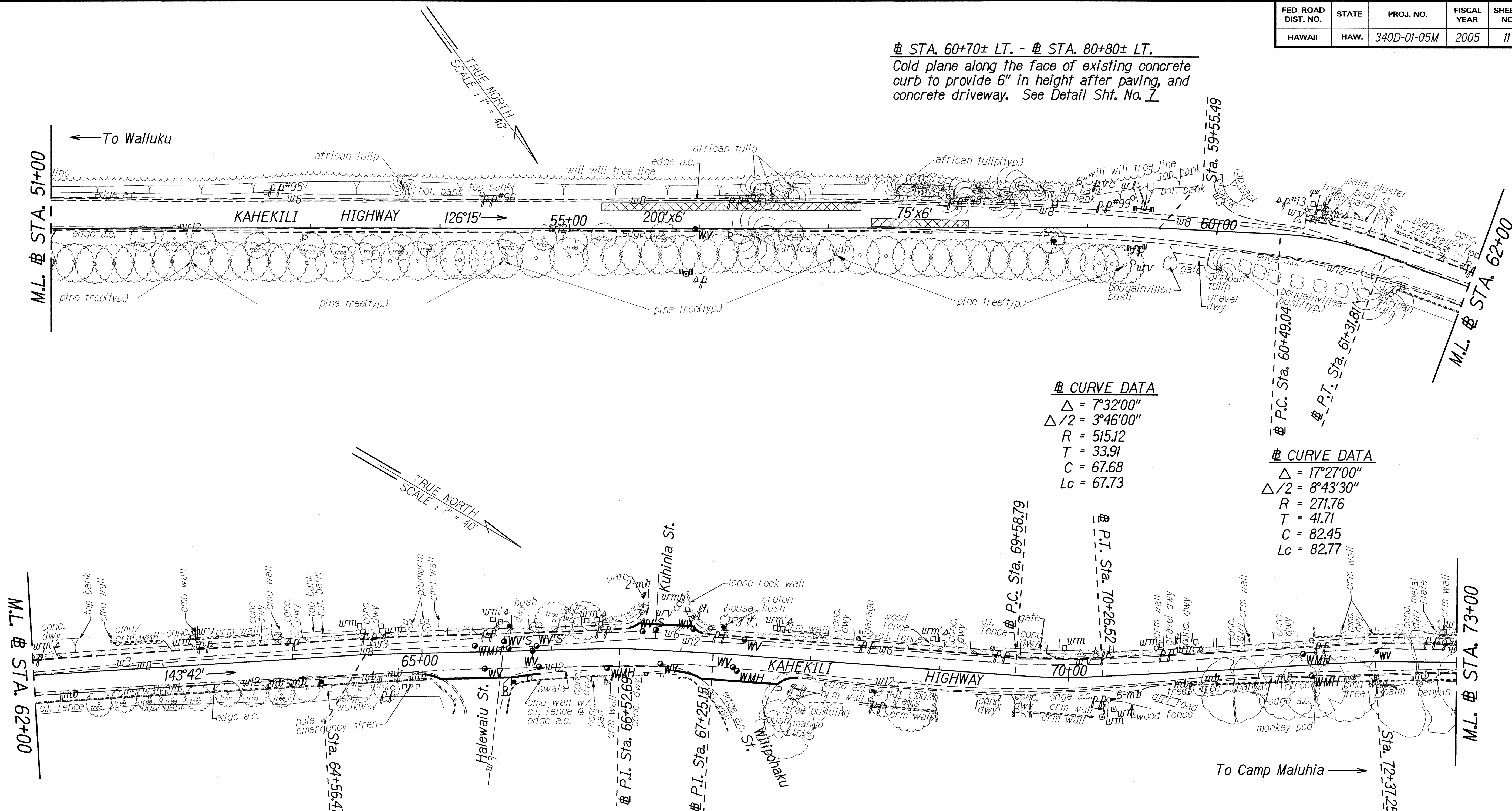
SHEET No. 3 OF 10 SHEETS

ADD.10

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE <u>3/04</u>
	DRAWN BY <u>jq</u>	
	TRACED BY _____	
NOTE BOOK	DESIGNED BY <u>cf</u>	
<u>mel, jay</u>	QUANTITIES BY _____	
<u>zhilimp3.dgn</u>	CHECKED BY _____	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	11	31

STA. 60+70± LT. - # STA. 80+80± LT.
Cold plane along the face of existing concrete curb to provide 6" in height after paving, and concrete driveway. See Detail Sht. No. 7



ORIGINAL PLAN	DATE
NOTED BY	9/04
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

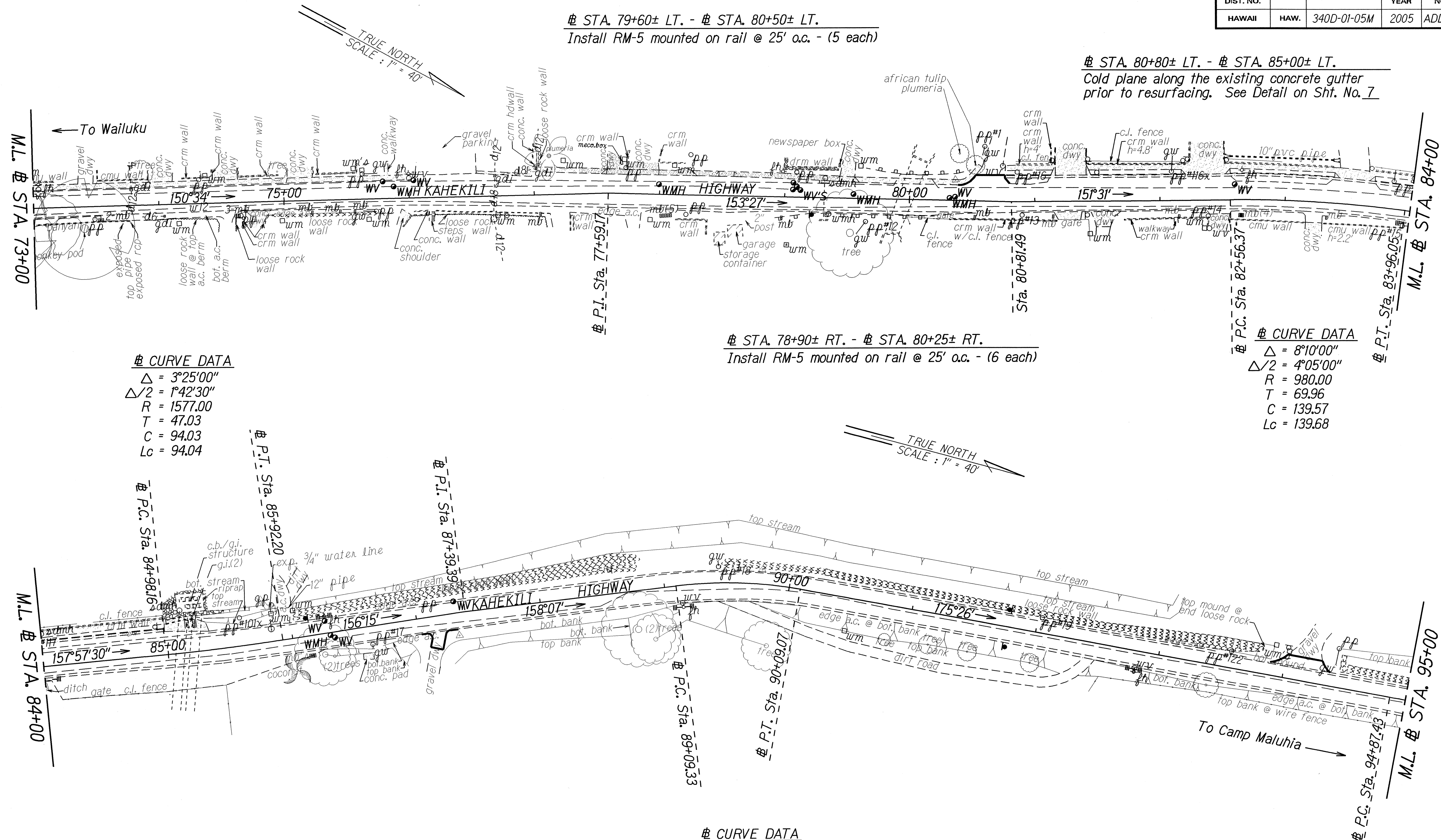
ROADWAY PLAN

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

Scale: 1" = 40' Date: September, 2004

SHEET No. 4 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	ADD.12	31



§ CURVE DATA

Δ	= 3°25'00"
Δ/2	= 1°42'30"
R	= 1577.00
T	= 47.03
C	= 94.03
Lc	= 94.04

§ STA. 78+90± RT. - § STA. 80+25± RT.
 Install RM-5 mounted on rail @ 25' o.c. - (6 each)

§ CURVE DATA

Δ	= 8°10'00"
Δ/2	= 4°05'00"
R	= 980.00
T	= 69.96
C	= 139.57
Lc	= 139.68

§ CURVE DATA

Δ	= 17°19'00"
Δ/2	= 08°39'30"
R	= 330.00
T	= 50.25
C	= 99.36
Lc	= 99.74

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

5-11-05	Eliminate resetting of guardrail post @ Sta. 78+90 Rt. - Sta. 80+25± Rt. and Sta. 79+60 Lt. - Sta. 80+50 Lt.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

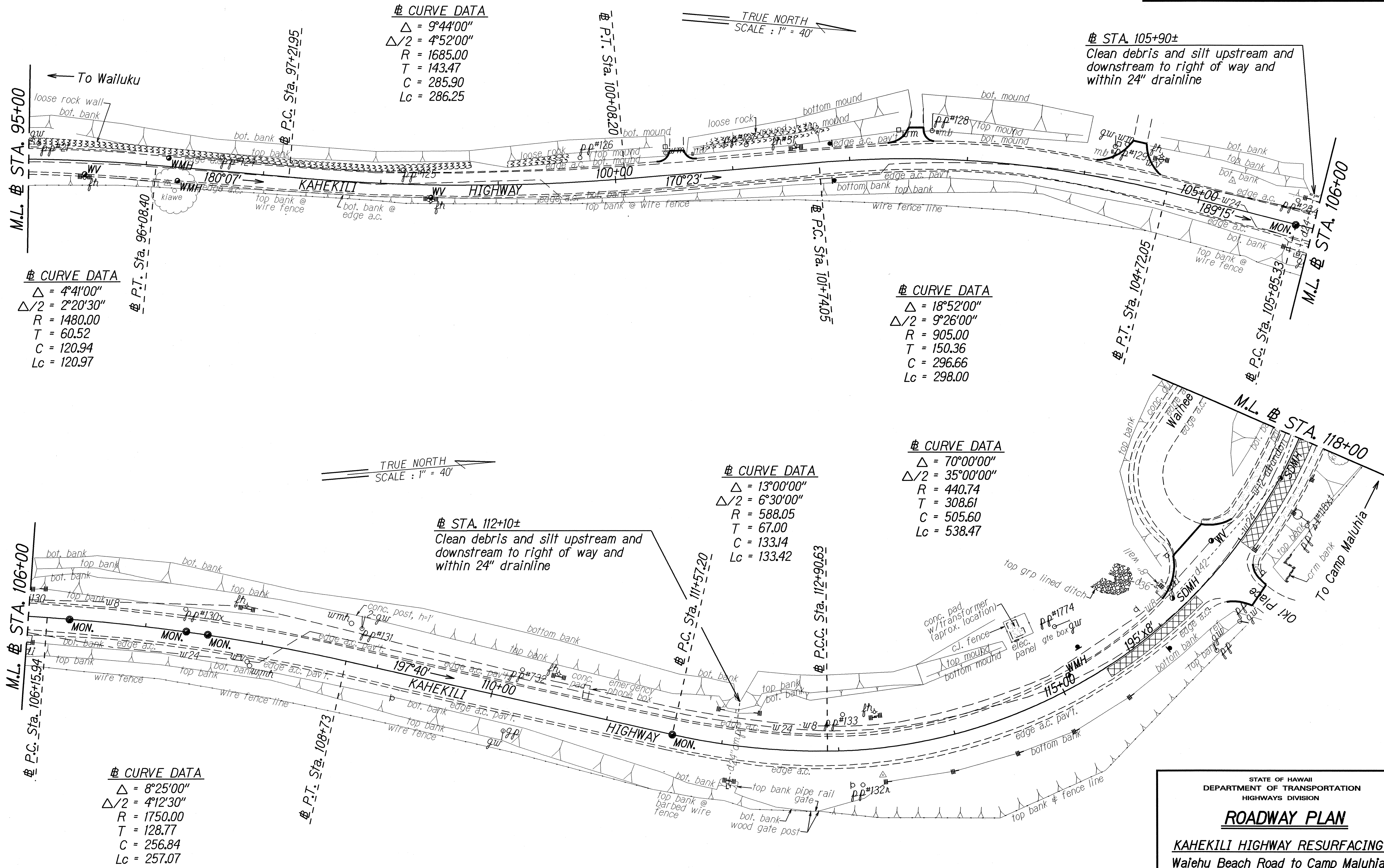
ROADWAY PLAN

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

Scale: 1" = 40' Date: September, 2004

SHEET No. 5 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	13	31



QUANTITY PLOTTED BY	DATE
DRAWN BY	9/04
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	9/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

Scale: 1" = 40' Date: September, 2004

SHEET No. 6 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	ADD.14	31

STA. 127+90± LT. - STA. 128+40± LT.
Cut back existing bank to provide sight distance.
(Limits to be determined in the field by Engineer)

ESTIMATED QUANTITY
Excavated Material 120 C.Y.

§ CURVE DATA

$\Delta = 13^{\circ}00'00''$
 $\Delta/2 = 06^{\circ}30'00''$
 $R = 588.05$
 $T = 67.00$
 $C = 133.14$
 $Lc = 133.42$

§ STA. 120+30±

Clean debris and silt upstream and downstream to right of way and within 24" drainline

§ CURVE DATA

$\Delta = 40^{\circ}00'00''$
 $\Delta/2 = 20^{\circ}00'00''$
 $R = 409.26$
 $T = 148.96$
 $C = 279.95$
 $Lc = 285.72$

§ CURVE DATA

$\Delta = 14^{\circ}00'00''$
 $\Delta/2 = 07^{\circ}00'00''$
 $R = 546.08$
 $T = 67.05$
 $C = 133.10$
 $Lc = 133.43$

§ CURVE DATA

$\Delta = 14^{\circ}00'00''$
 $\Delta/2 = 07^{\circ}00'00''$
 $R = 546.08$
 $T = 67.05$
 $C = 133.10$
 $Lc = 133.43$

§ STA. 128+00 RT. - § STA. 132+50 RT.
Install RM-3 (White) with flexible post @ 25' o.c. - (19 each)

§ STA. 138+70± LT. - § STA. 140+00± LT.
Reset existing guardrail post - (22 each)

§ CURVE DATA

$\Delta = 38^{\circ}56'30''$
 $\Delta/2 = 19^{\circ}28'15''$
 $R = 282.48$
 $T = 99.87$
 $C = 188.32$
 $Lc = 191.99$

§ CURVE DATA

$\Delta = 50^{\circ}48'44''$
 $\Delta/2 = 25^{\circ}24'22''$
 $R = 291.92$
 $T = 138.65$
 $C = 250.49$
 $Lc = 258.89$

§ STA. 139+00 RT. - § STA. 140+00 RT.
Install RM-3 (White) with flexible post @ 25' o.c. - (5 each)

§ STA. 139+40±

Clean debris and silt upstream and downstream to right of way and within 24" drainline

§ STA. 140+00± LT. - § STA. 223+93± LT.

Cold plane along the face of existing A.C. curb to provide 6" in height after paving. See Detail on Sht. No. 7

DATE	9/04
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NOTES	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

Scale: 1" = 40' Date: September, 2004

SHEET No. 7 OF 10 SHEETS

ADD.14

5-11-05 Added cold plane hatch markings @ The Waihee Bridge approaches

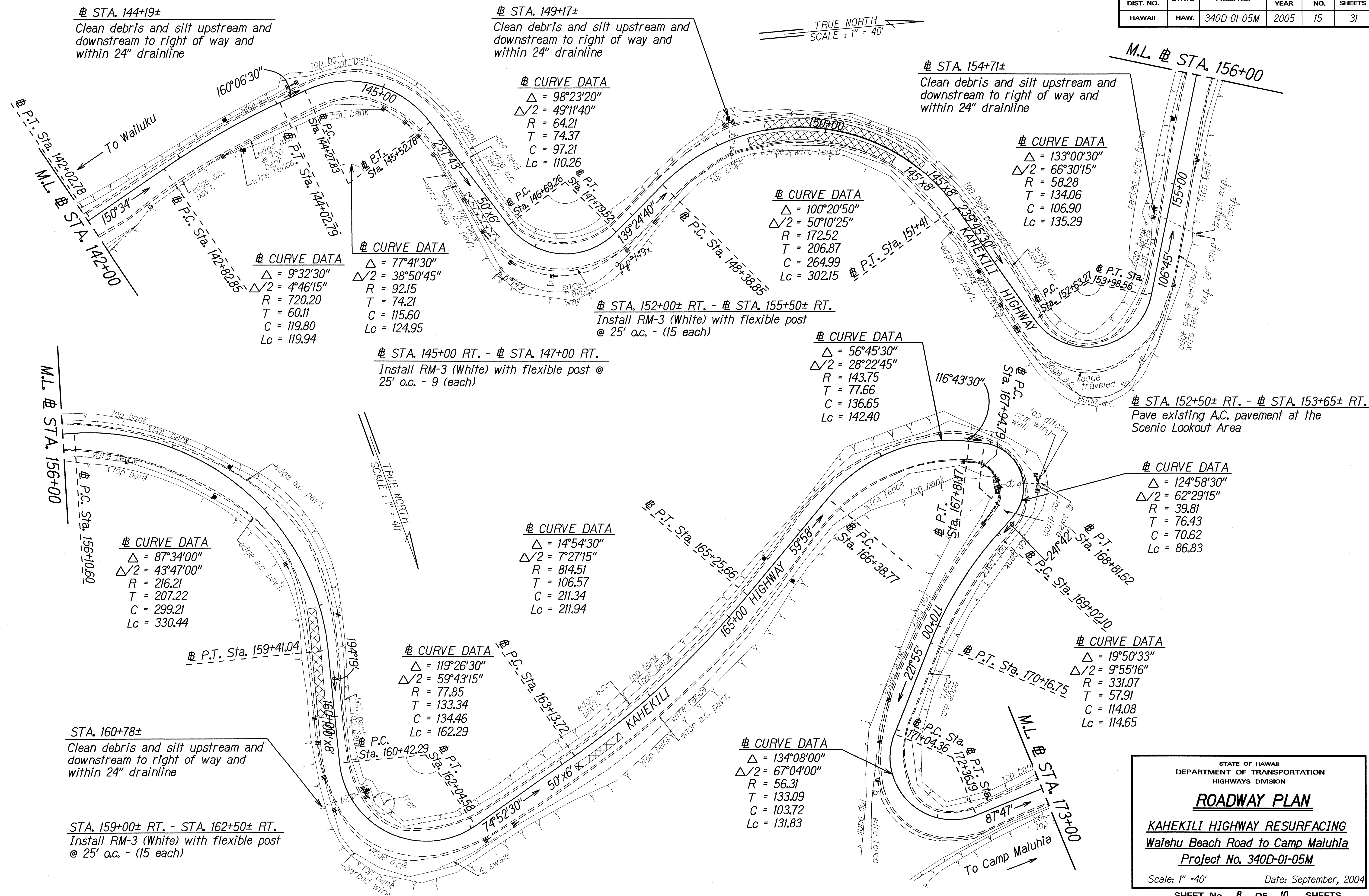
DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

Scale: 1" = 40' Date: September, 2004

SHEET No. 8 OF 10 SHEETS



ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY <u>g</u>	<u>9/04</u>
NOTE BOOK	TRACED BY _____	
	DESIGNED BY <u>g</u>	
	QUANTITIES BY _____	
<u>mel, lay</u>	CHECKED BY _____	
<u>7/mel/8/cgn</u>		

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	ADD.16	31

CURVE DATA
 $\Delta = 30^{\circ}53'00''$
 $\Delta/2 = 15^{\circ}26'30''$
 $R = 175.05$
 $T = 48.35$
 $C = 93.22$
 $L_c = 94.35$

CURVE DATA
 $\Delta = 23^{\circ}06'18''$
 $\Delta/2 = 11^{\circ}33'09''$
 $R = 331.36$
 $T = 67.73$
 $C = 132.72$
 $L_c = 133.62$

⌘ CURVE DATA
 $\Delta = 52^{\circ}07'07''$
 $\Delta/2 = 26^{\circ}03'33.5''$
 $R = 102.76$
 $T = 50.25$
 $C = 90.29$
 $L_c = 93.47$

CURVE DATA
 $\Delta = 24^{\circ}00'00''$
 $\Delta/2 = 12^{\circ}00'00''$
 $R = 205.00$
 $T = 43.57$
 $C = 85.24$
 $LC = 85.87$

CURVE DATA
 $\Delta = 46^{\circ}43'30''$
 $\Delta/2 = 23^{\circ}21'45''$
 $R = 150.00$
 $T = 64.79$
 $C = 118.96$
 $L_c = 122.33$

STA. 173+00 LT. - # STA. 174+00 LT.
Install RM-3 (White) with flexible
post @ 25' o.c. - (5 each)

STA. 184+80
Clean debris and silt upstream and
downstream to right of way and
within 24" drainline

STA. 177+90± RT. - # STA. 178+70± RT.
Demolish existing guardrail and concrete post

Sta. 176+90± RT. - Sta. 179+45± RT.
Install 255 L.F. of Type 3 guardrail W-Beam with strong post
Approach & Trailing Ends - Type "G"

NOTE:
Demolition of existing guardrail and concrete post shall be paid incidental under this item.

CURVE DATA
 $\Delta = 31^{\circ}23'30''$
 $\Delta/2 = 15^{\circ}41'45''$
 $R = 175.05$
 $T = 49.19$
 $C = 94.71$
 $LC = 95.91$

CURVE DATA
 $\Delta = 26^{\circ}07'00''$
 $\Delta/2 = 13^{\circ}03'30''$
 $R = 377.97$
 $T = 87.67$
 $C = 170.80$
 $LC = 172.29$

CURVE DATA
 $\Delta = 27^{\circ}26'00''$
 $\Delta/2 = 13^{\circ}43'00''$
 $R = 245.11$
 $T = 59.83$
 $C = 116.24$
 $Lc = 117.36$

CURVE DATA
 $\Delta = 70^{\circ}14'00''$
 $\Delta/2 = 35^{\circ}07'00''$
 $R = 81.52$
 $T = 57.33$
 $C = 93.79$
 $LC = 99.93$

4 CURVE DATA
 $\Delta = 109^{\circ}50'30''$
 $\Delta/2 = 54^{\circ}55'15''$
 $R = 80.00$
 $T = 113.92$
 $C = 130.94$
 $L_c = 153.37$

STA. 192+10± RT. - # STA. 192+45± RT.
Pave existing A.C. pavement at the
Scenic Lookout Area

STA. 194+54
Clean debris and silt upstream and
downstream to right of way and
within 24" drainline

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
	DRAWN BY <u>40</u>	• <u>9/04</u>
	TRACED BY _____	• _____
NOTE BOOK	DESIGNED BY <u>cr</u>	• _____
	QUANTITIES BY _____	• _____
<u>2/thimp9.dgn</u>	CHECKED BY _____	• _____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

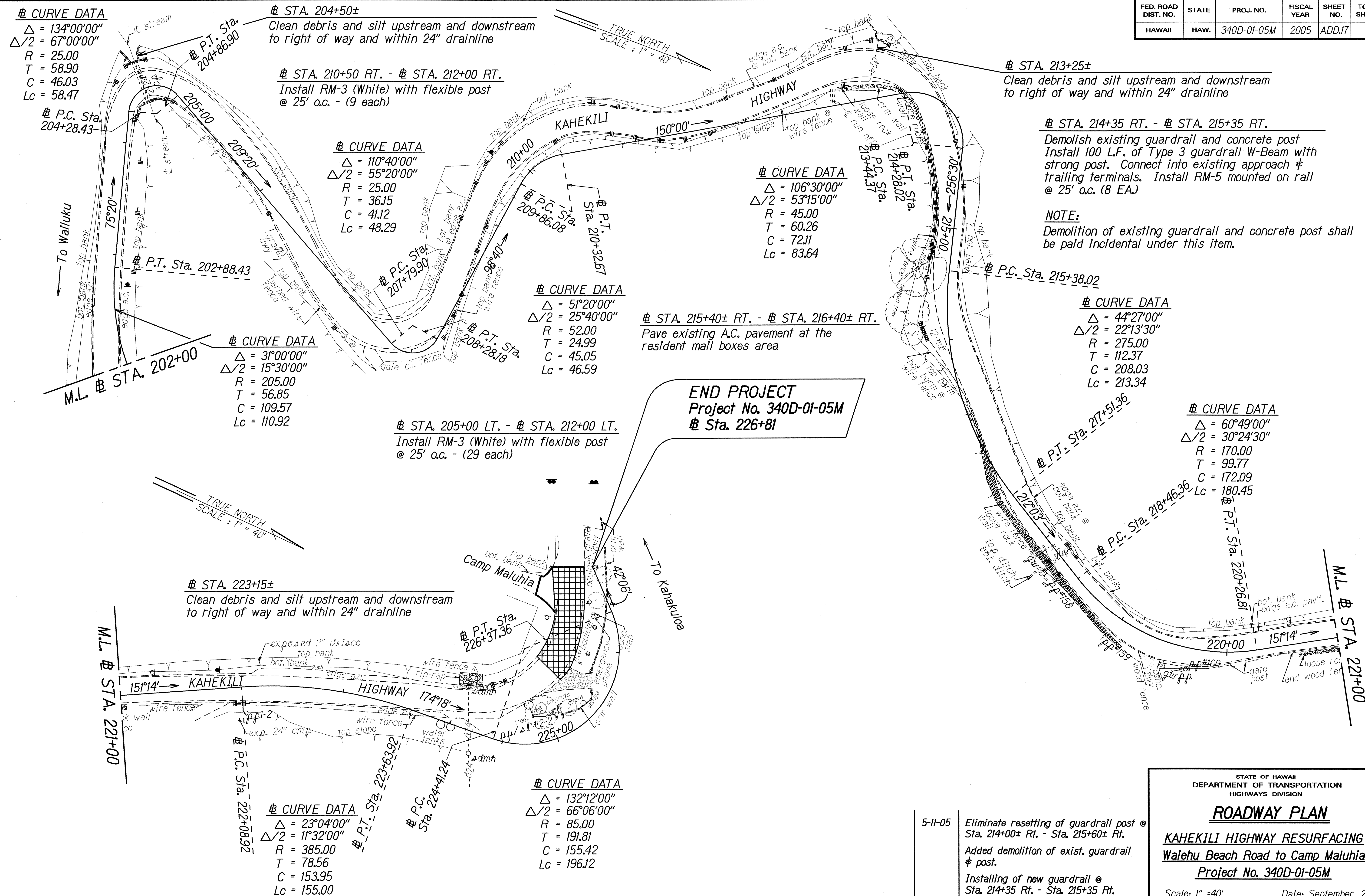
Scale: 1" = 40' Date: September, 2004

ADD.16

5-11-05 Eliminate resetting of guardrail post @ Sta. 176+90 Rt. - Sta. 178+70 Rt.
Added demolition of exist. guardrail and post.
Installing of new guardrail @ Sta. 177+90 Rt. - Sta. 179+45 Rt.

DATE	REVISION
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FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	340D-01-05M	2005	ADD.17	31



5-11-05	<i>Eliminate resetting of guardrail post @ Sta. 214+00± Rt. - Sta. 215+60± Rt.</i> <i>Added demolition of exist. guardrail & post.</i> <i>Installing of new guardrail @ Sta. 214+35 Rt. - Sta. 215+35 Rt.</i>
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KAHEKILI HIGHWAY RESURFACING
Waiehu Beach Road to Camp Maluhia
Project No. 340D-01-05M

Scale: 1" = 40' Date: September, 2004

SHEET No. 10 OF 10 SHEETS