

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-07M	2009	15	57

TRUE NORTH
SCALE 1" = 40'

MATCHLINE -168+00

TO ULUPALAKUA

ep

ep

PC = -178+63.61
R = 320.00

PI @ STA. (-)172+38.20

PI @ STA. (-)171+76.24

PI @ STA. (-)170+75.46

PI @ STA. (-)169+73.21

MATCHLINE -169+00

PC = -168+93.31
R = 300.00

PI @ STA. (-)168+92.88

PI @ STA. (-)164+94.93

PI @ STA. (-)162+31.13

PC = -161+06.61
R = 120.00

PI @ STA. (-)159+07± RT. TO STA. (-)157+82± RT.
WIDEN PAVEMENT FROM EXISTING EDGE OF PAVEMENT 2'

30' TAPER TO EXISTING EDGE OF PAVEMENT

TO KEOKEA

MATCHLINE -158+00

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KULA HIGHWAY RESURFACING
KEKAULIKE AVENUE TO ULUPALAKUA
PROJECT NO. 37CDE - 01 - 07M

Michael T. Ishikawa
LICENSED PROFESSIONAL ENGINEER
No. 7601-C
HAWAII U.S.A.

LICENSE EXPIRES 4/30/2010

This work was prepared by me or under my supervision and construction of this project will be under my observation.

Scale: 1"=40' Date: May 2009

SHEET No. 3 OF 17 SHEETS



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 PROFESSIONAL
 ENGINEER
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DEPARTMENT OF TRANSPORTATION
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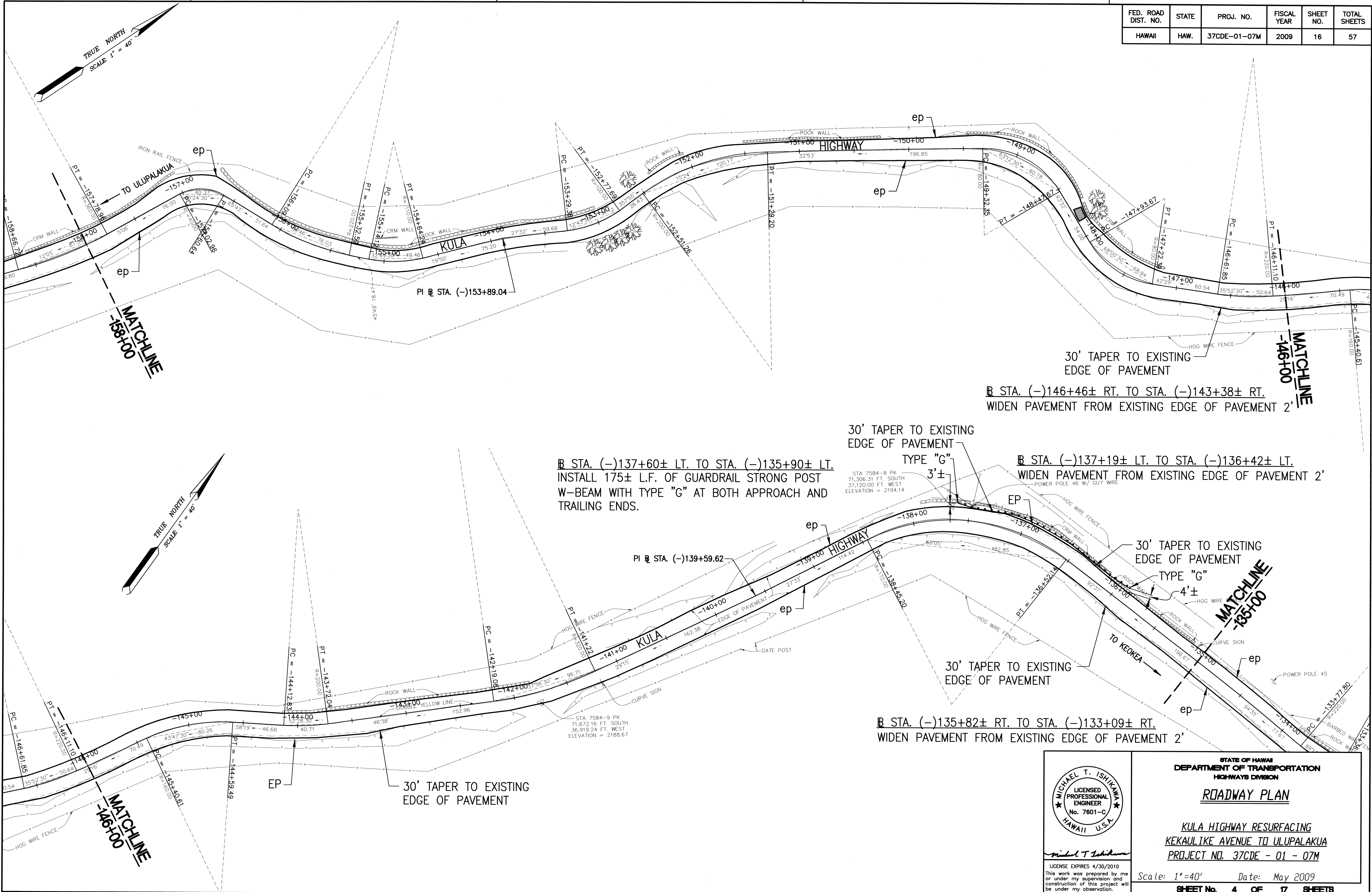
ROADWAY PLAN

KULA HIGHWAY RESURFACING
KEKAULIKE AVENUE TO ULUPALAKUA
PROJECT NO. 37CDE - 01 - 07M

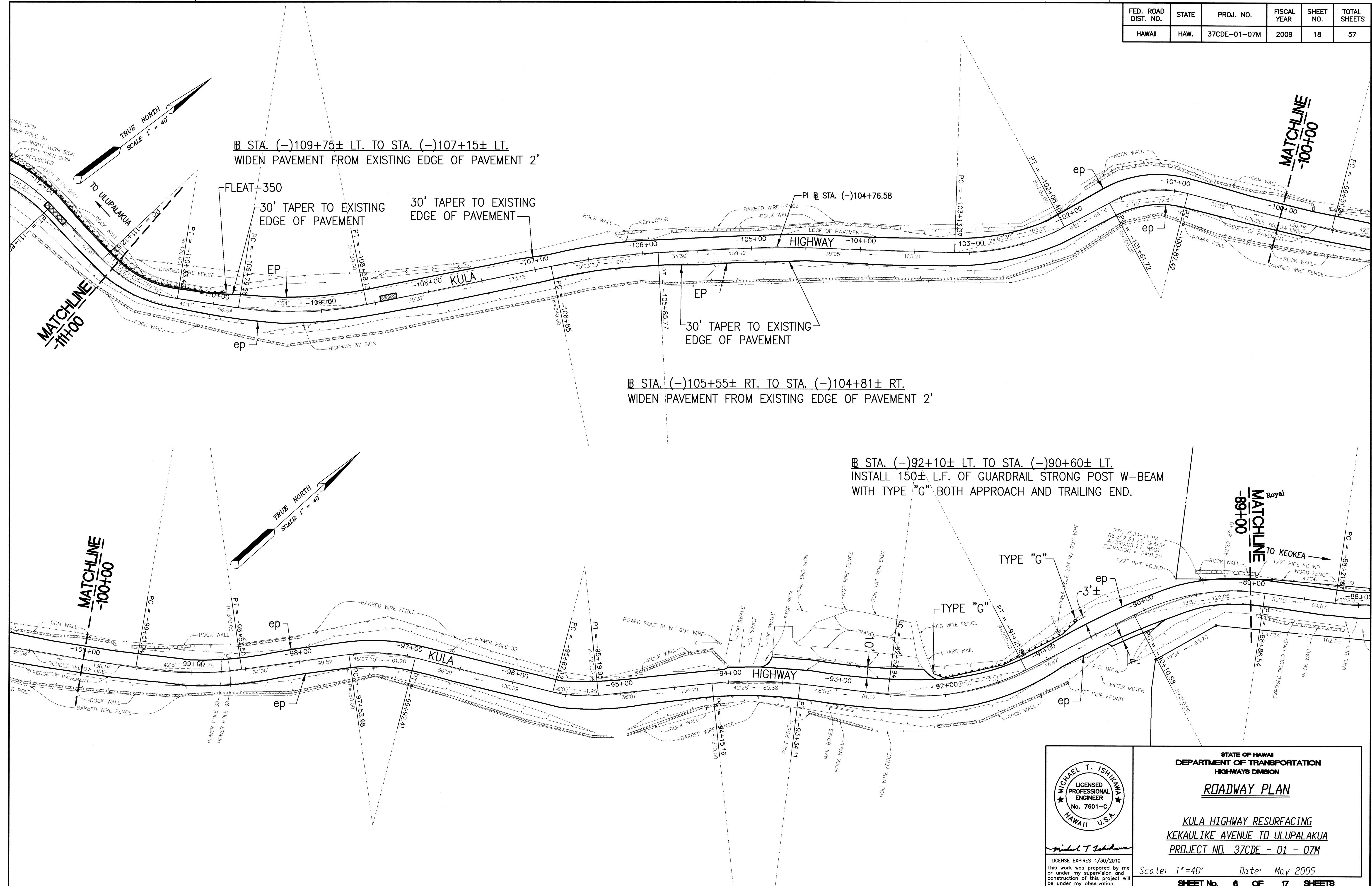
Scale: 1"=40' Date: May 2009

SHEET No. 3 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-07M	2009	16	57



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-07M	2009	18	57

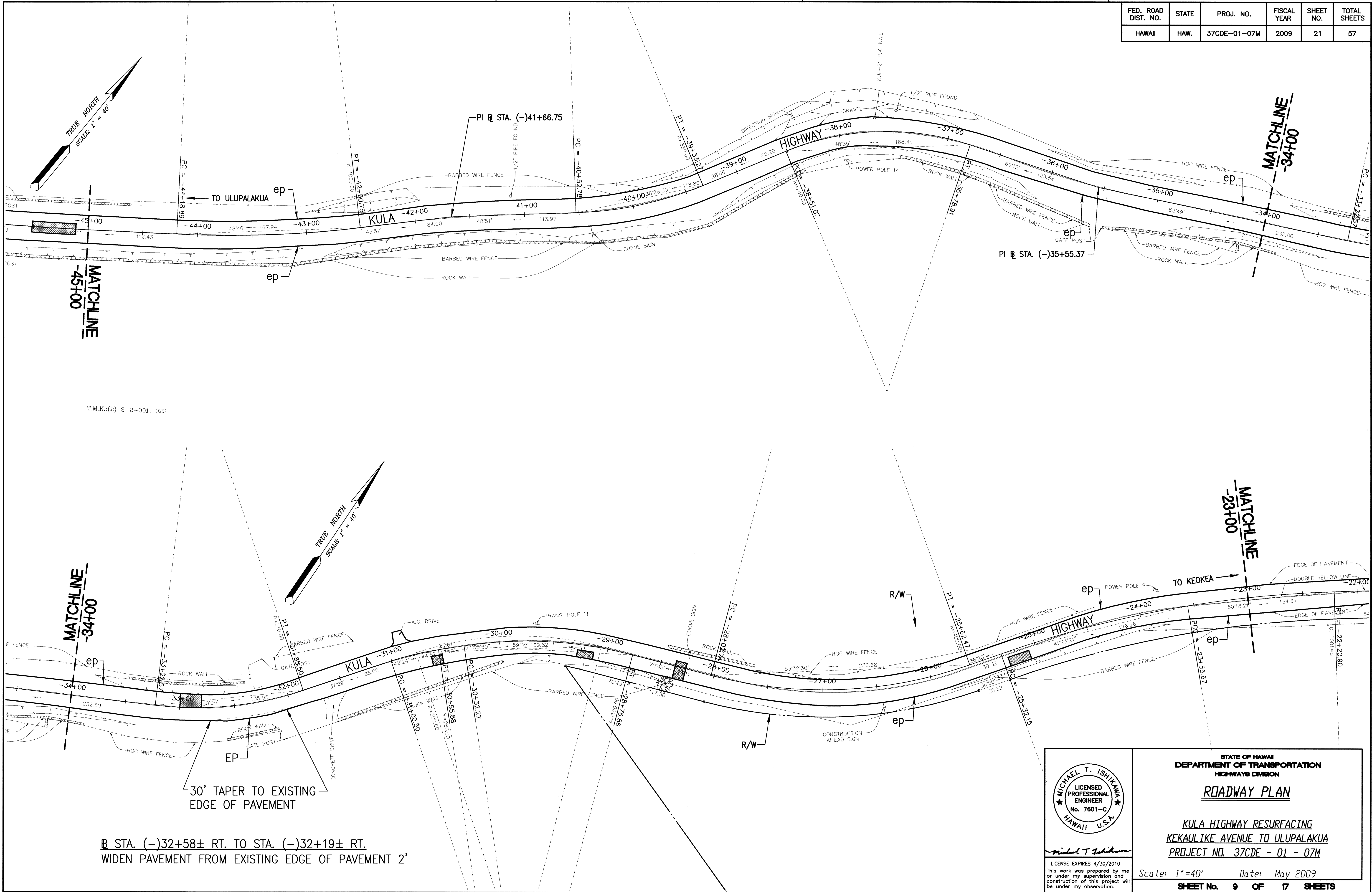


ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____	
	DRAWN BY _____	
NOTE BOOK	TRACED BY _____	
	DESIGNED BY _____	
	QUANTITIES BY _____	
	CHECKED BY _____	
No. _____		

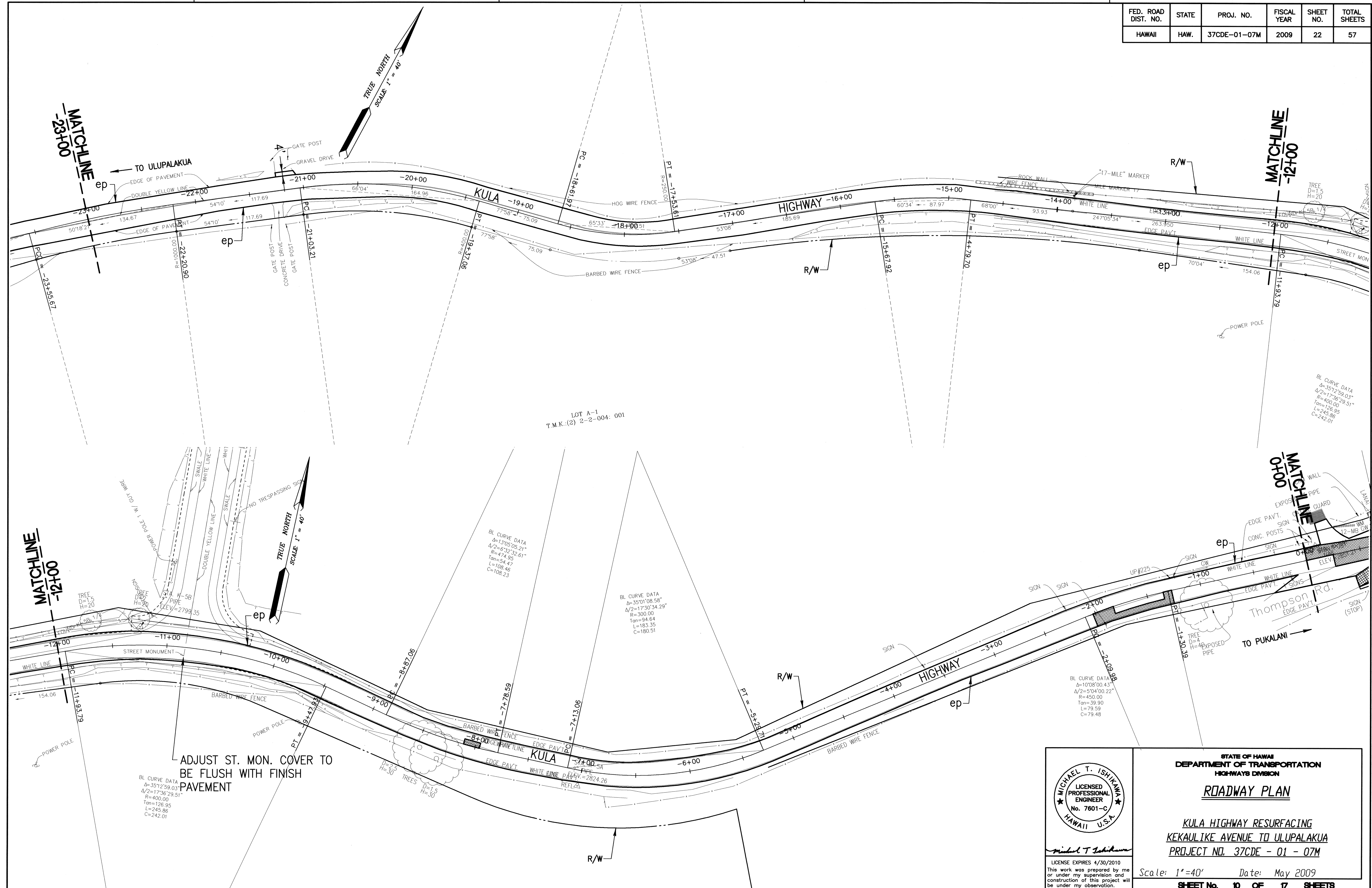
	STATE OF HAWAII
	DEPARTMENT OF TRANSPORTATION
	HIGHWAYS DIVISION
	<u>ROADWAY PLAN</u>
	<u>KULA HIGHWAY RESURFACING</u>
	<u>KEKAULIKE AVENUE TO ULUPALAKUA</u>
	<u>PROJECT NO. 37CDE - 01 - 07M</u>
<i>Michael T. Ishikawa</i>	
LICENSE EXPIRES 4/30/2010	
This work was prepared by me or under my supervision and construction of this project will be under my observation.	Scale: 1"=40' Date: May 2009
	SHEET No. 6 OF 17 SHEETS

May 27, 2009 - 1:24pm
M:\Projects\MO708.00\Oahu_RoadwayPlan\ROAD_PLAN.dwg

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



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-07M	2009	22	57



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

	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
	<u>ROADWAY PLAN</u>
	<u>KULA HIGHWAY RESURFACING</u> <u>KEKAULIKE AVENUE TO ULUPALAKUA</u> <u>PROJECT NO. 37CDE - Q1 - 07M</u>
	SCALE: 1" = 40' DATE: MAY 2009 SHEET NO. 10 OF 17 SHEETS

[illegible]

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

	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
	<u>ROADWAY PLAN</u>
	KULA HIGHWAY RESURFACING KEKAULIKE AVENUE TO ULUPALAKUA PROJECT NO. 37CDE - 01 - 07M
	Scale: 1"=40' Date: May 2009 SHEET No. 11 OF 17 SHEETS

TRUE NORTH
SCALE 1" = 40'

BL CURVE DATA
 $\Delta=20^{\circ}30'00.69"$
 $\Delta/2=10^{\circ}15'00.35"$
 $R=954.99$
 $Tan=172.69$
 $L=341.69$
 $C=339.87$

BL CURVE DATA
 $\Delta=23^{\circ}15'59.21"$
 $\Delta/2=11^{\circ}37'59.61"$
 $R=955.01$
 $Tan=198.61$
 $L=387.81$
 $C=385.15$

BL CURVE DATA
 $\Delta=18^{\circ}44'59.46"$
 $\Delta/2=9^{\circ}22'29.73"$
 $R=716.30$
 $Tan=118.26$
 $L=234.41$
 $C=233.36$

BL CURVE DATA
 $\Delta=13^{\circ}13'58.8"$
 $\Delta/2=6^{\circ}36'59.45"$
 $R=955.03$
 $Tan=110.78$
 $L=220.57$
 $C=220.08$

BL CURVE DATA
 $\Delta=36^{\circ}32'55.75"$
 $\Delta/2=18^{\circ}16'27.88"$
 $R=513.02$
 $Tan=189.22$
 $L=365.53$
 $C=359.36$

BL CURVE DATA
 $\Delta=18^{\circ}44'59.46"$
 $\Delta/2=9^{\circ}22'29.73"$
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BL CURVE DATA
 $\$

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KULA HIGHWAY RESURFACING
KEKAULIKE AVENUE TO ULUPALAKUA
PROJECT NO. 37CDE - 01 - 07M

Michael T Ishikawa

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Scale: 1"=40' Date: May 2009

SHEET No. 12 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-07M	2009	25	57

B STA. 50+30± LT. TO STA. 51+00± LT.
REMOVE & SALVAGE EXISTING GUARDRAIL TERMINAL
AND DISPOSE OF CONC. BLOCK. INSTALL 25'± L.F.
STRONG POST W-BEAM WITH ET-2000 AT APPROACH
END.

B STA. 47+47± LT. TO STA. 50+30± LT.
RESET EXISTING GUARDRAIL POSTS (44 EA.)

B STA. 45+73±
CLEAN, REMOVE AND DISPOSE SILT,
TRASH, VEGETATION GROWTH FROM
EXISTING CULVERTS AND ADJOINING
DRAINAGE STRUCTURES WITHIN
PROJECT LIMITS.

RT. TO STA. 49+31±
RESET EXISTING GUARDRAIL POSTS (27 EA.)

B STA. 51+46±
CLEAN, REMOVE AND DISPOSE SILT,
TRASH, VEGETATION GROWTH FROM
EXISTING CULVERTS AND ADJOINING
DRAINAGE STRUCTURES WITHIN
PROJECT LIMITS.

B STA. 61+95± LT.
REMOVE & SALVAGE EXISTING GUARDRAIL
TERMINAL AND DISPOSE OF CONC. BLOCK.
INSTALL FLEAT-350 TERMINAL.

RE STA. 65+18± LT. TO STA. 67+41± LT.
RESET EXISTING GUARDRAIL POSTS (34 EA.)

RE STA. 57+21± LT. TO STA. 61+95± LT.
RESET EXISTING GUARDRAIL POSTS (76 EA.)

RE STA. 53+46± LT. TO STA. 56+85± LT.
RESET EXISTING GUARDRAIL POSTS (51 EA.)

FLEAT-350-

EDGE DATA

DATE	TIME	VALUE
65-09	10:00	55.00

CURVE DATA
 $\Delta = 21'19.43.82''$
 $\Delta/P = 0'39.51.91''$
 $\Delta/P = 955.20$
 $\tan = 179.87$
 $L = 355.58$
 $C = 353.53$


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STATE OF HAWAII
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 HIGHWAYS DIVISION
ROADWAY PLAN
KULA HIGHWAY RESURFACING
KEKAULIKE AVENUE TO ULUPALAKUA
PROJECT NO. 37CDE - 01 - 07M
 Scale: 1"=40' Date: May 2009
 SHEET No. 13 OF 17 SHEETS

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

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

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KEKAULIKE AVENUE TO ULUPALAKUA
PROJECT NO. 37CDE - 01 - 07M

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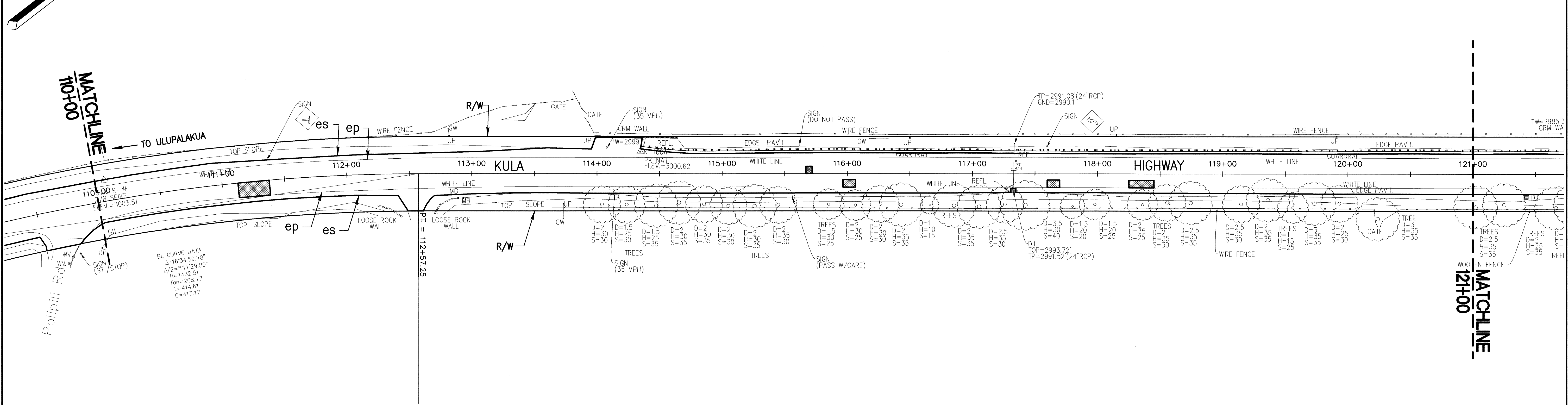
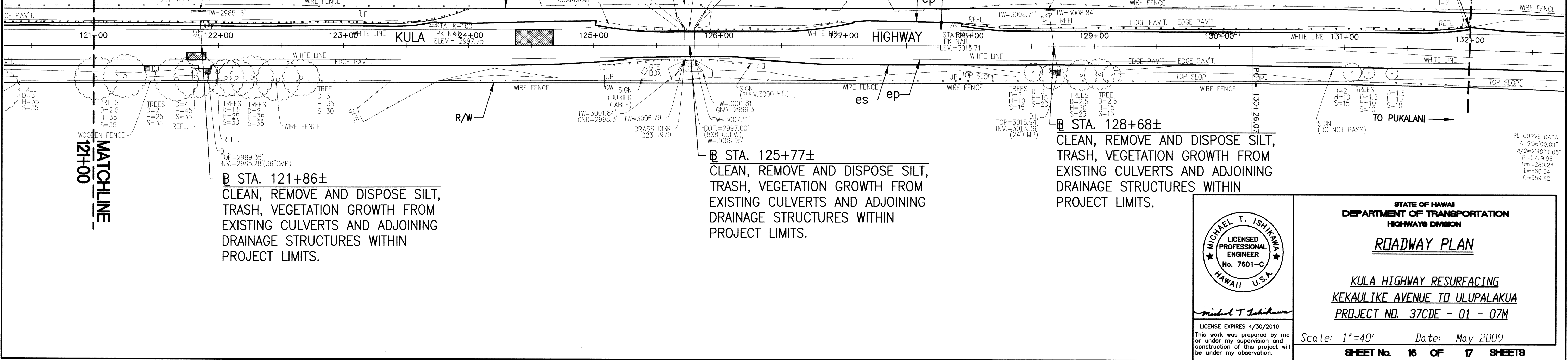
SHEET No. 14 OF 17 SHEETS

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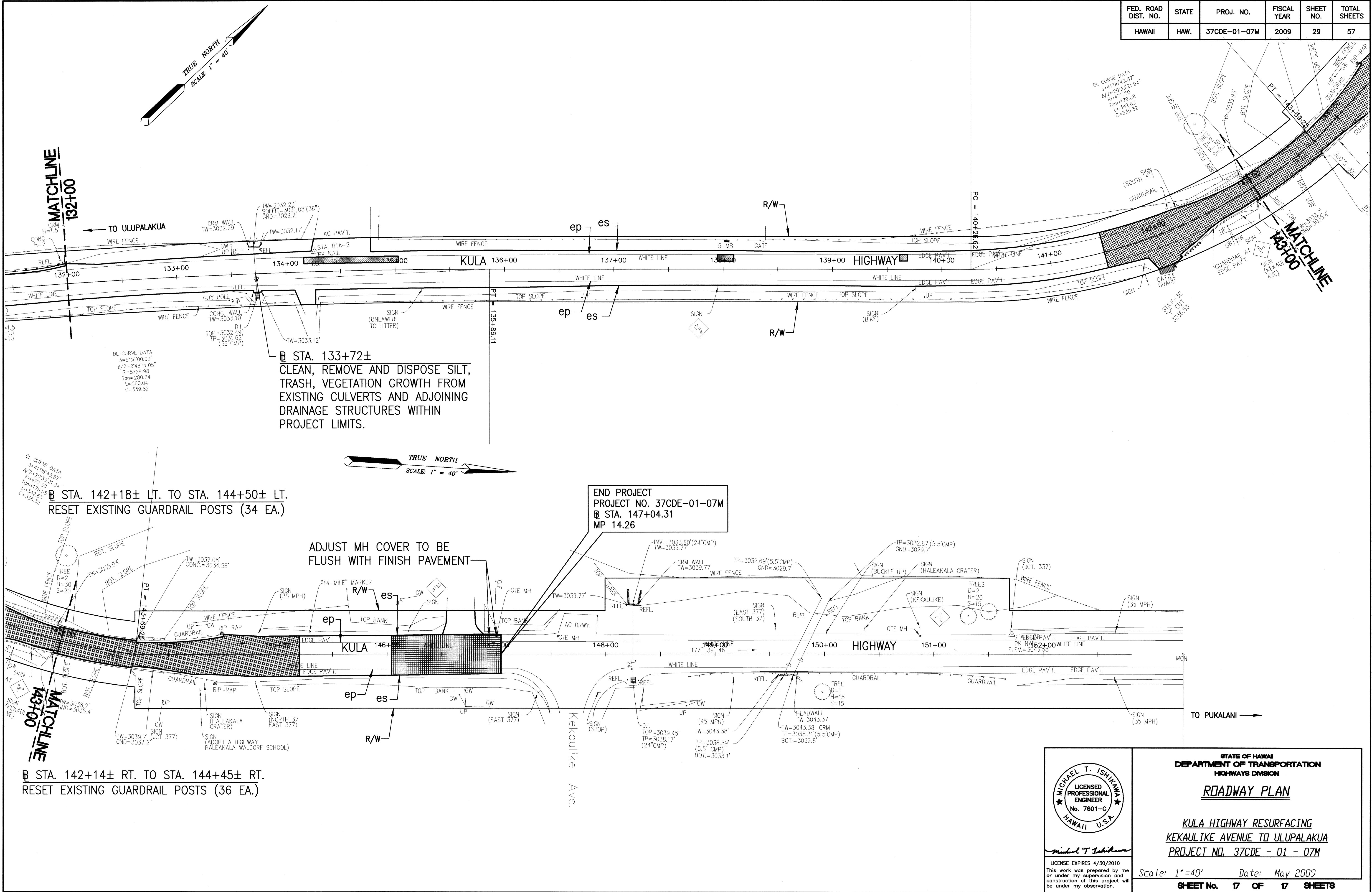
27

R STA 114+35+ IT TO STA 123+99+ IT

[illegible]

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FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37CDE-01-07M	2009	29	57



DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

KULA HIGHWAY RESURFACING
KEKAULIKE AVENUE TO ULUPALAKUA
PROJECT NO. 37CDE - 01 - 07M

Scale: 1"=40' Date: May 2009

SHEET No. 17 OF 17 SHEETS

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