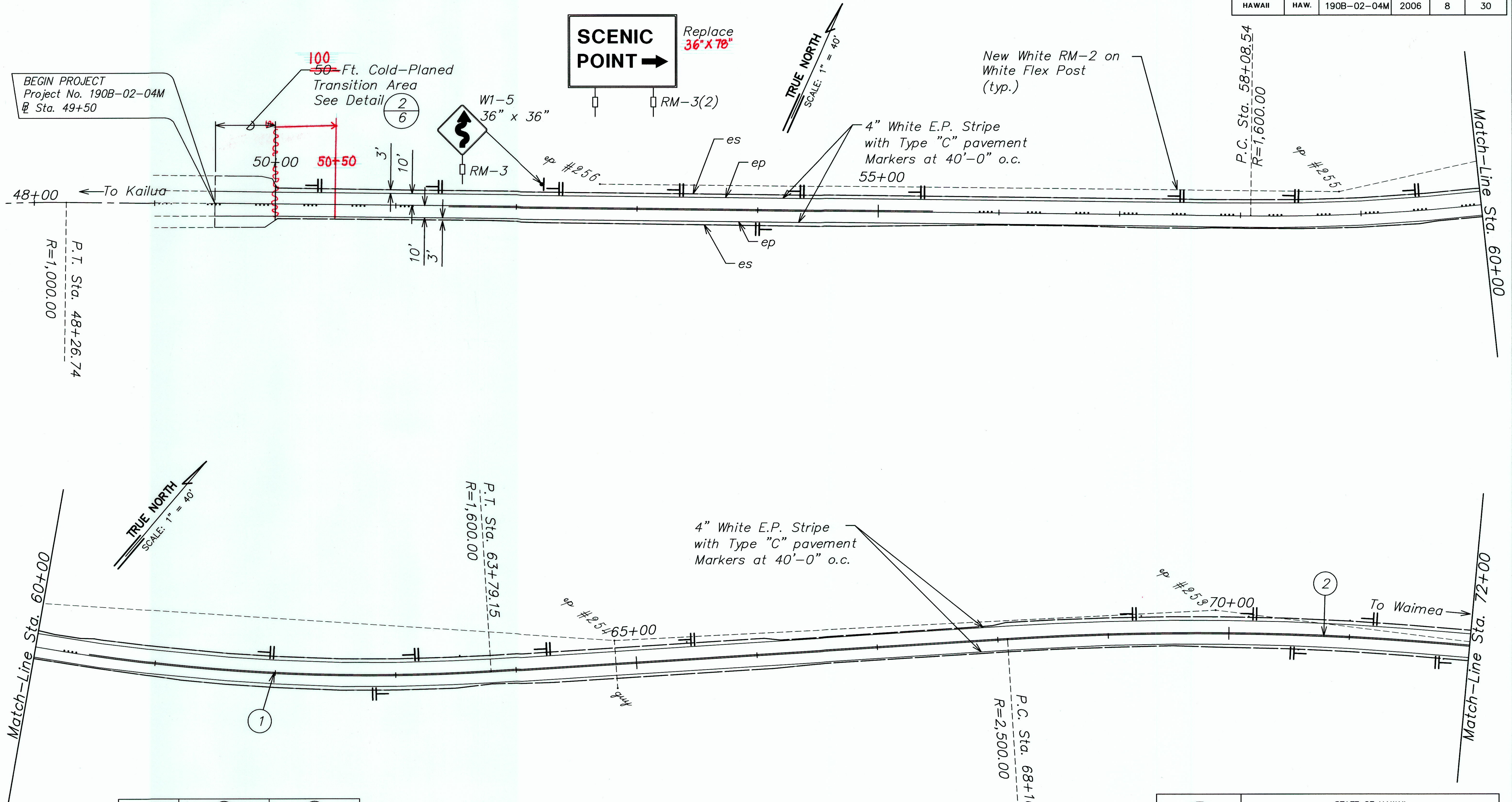
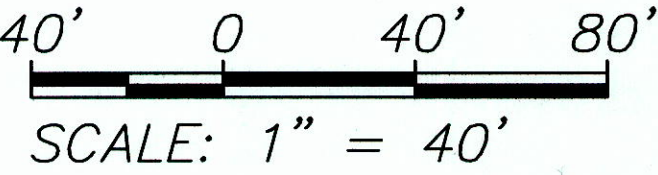


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	8	30



CURVE	①	②
Δ	20°26'	32°9'
Δ/2	10°13'	16°4'30"
R	1600.00	2500.00
T	288.37	720.41
C	567.59	1384.48
Lc	570.61	1402.81



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
BEGIN TO STA. 72+00

MAMALAHOA HIGHWAY PAVEMENT
PREVENTIVE MAINTENANCE

Puu Waawaa Ranch to Kaupulehu
Project No. 190B-02-04M

Scale: As Shown Date: April 2006

SHEET NO. 1 OF 14 SHEETS

Sheet Title: ROADWAY PLAN
Last Save by: RGQ
Last Saved: 4/11/2006
Plotted on: 5/4/2006

G:\DOT\04-02\ACAD\ROUTE190\dwg\Sheets\DOT042008.dwg

DATE: _____

DESIGNED BY: _____

CHECKED BY: _____

QUANTITY BY: _____

PLANNED BY: _____

TRACED BY: _____

DRAWN BY: _____

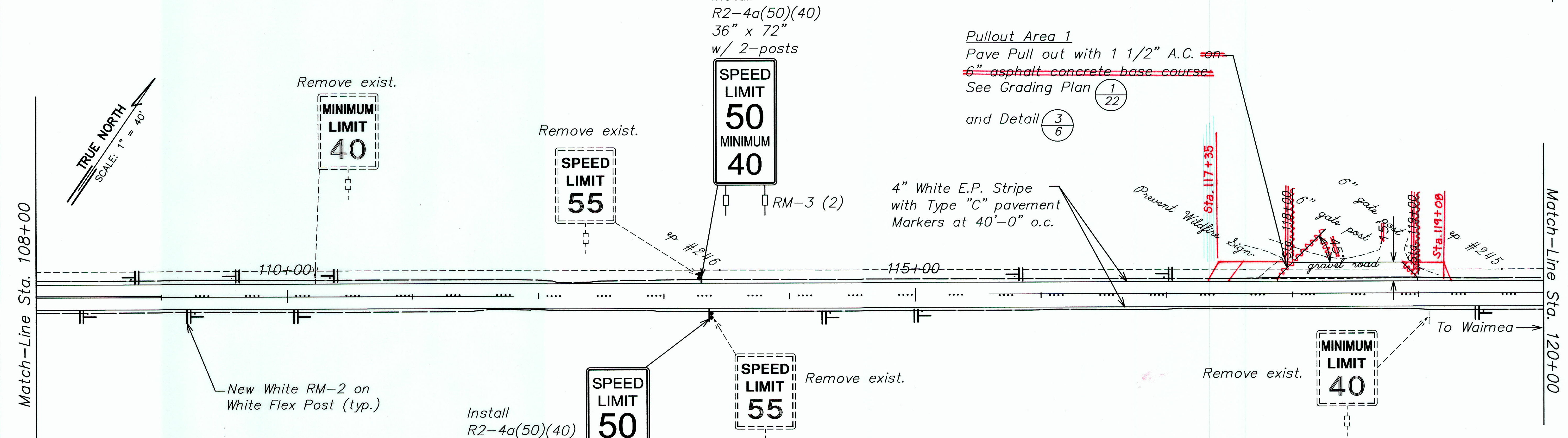
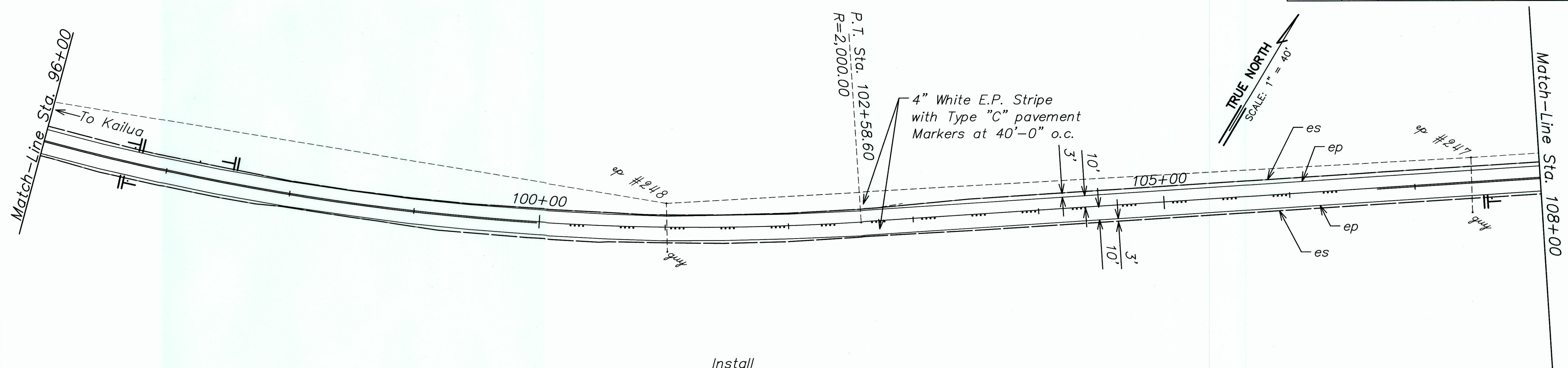
SURVEY PLOTTED BY: _____

ORIGINAL PLAN: _____

NOTES: _____

"AS-BUILT"

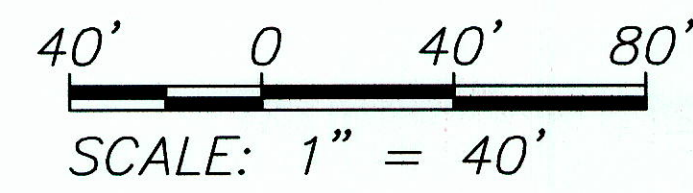
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	10	30



Sheet Title: ROADWAY PLAN
 Last Save by: RGQ
 Last Saved: 4/11/2006
 Plotted on: 5/4/2006
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DATE	BY
DESIGNED BY	
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITY BY	
ORIGINAL PLAN	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLAN
 STA. 96+00 TO STA. 120+00
 MAMALAHOA HIGHWAY PAVEMENT
 PREVENTIVE MAINTENANCE
 Puu Waawaa Ranch to Kaupulehu
 Project No. 190B-02-04M
 Scale: As Shown Date: April 2006
 SHEET NO. 3 OF 14 SHEETS



"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	13	30

CURVE	(6)
Δ	6°42'
$\Delta/2$	3°21'
R	1600.00
T	93.66
C	186.99
Lc	187.10

TRUE NORTH
SCALE: 1" = 40'

4" White E.P. Stripe with Type "C" pavement Markers at 40'-0" o.c.

Pullout Area 2
Pave Pull out with 1 1/2" A.C. on ~~6" asphalt concrete base course~~
See Grading Plan (2/22) and Detail (3/6)

Pullout Area 6
Pave Pull out with 1 1/2" A.C.
See Grading Plan (1/23a) and Detail (3/6)

Sheet Title: ROADWAY PLAN
Last Save by: RGQ
Last Saved: 4/14/2006
Plotted on: 5/4/2006
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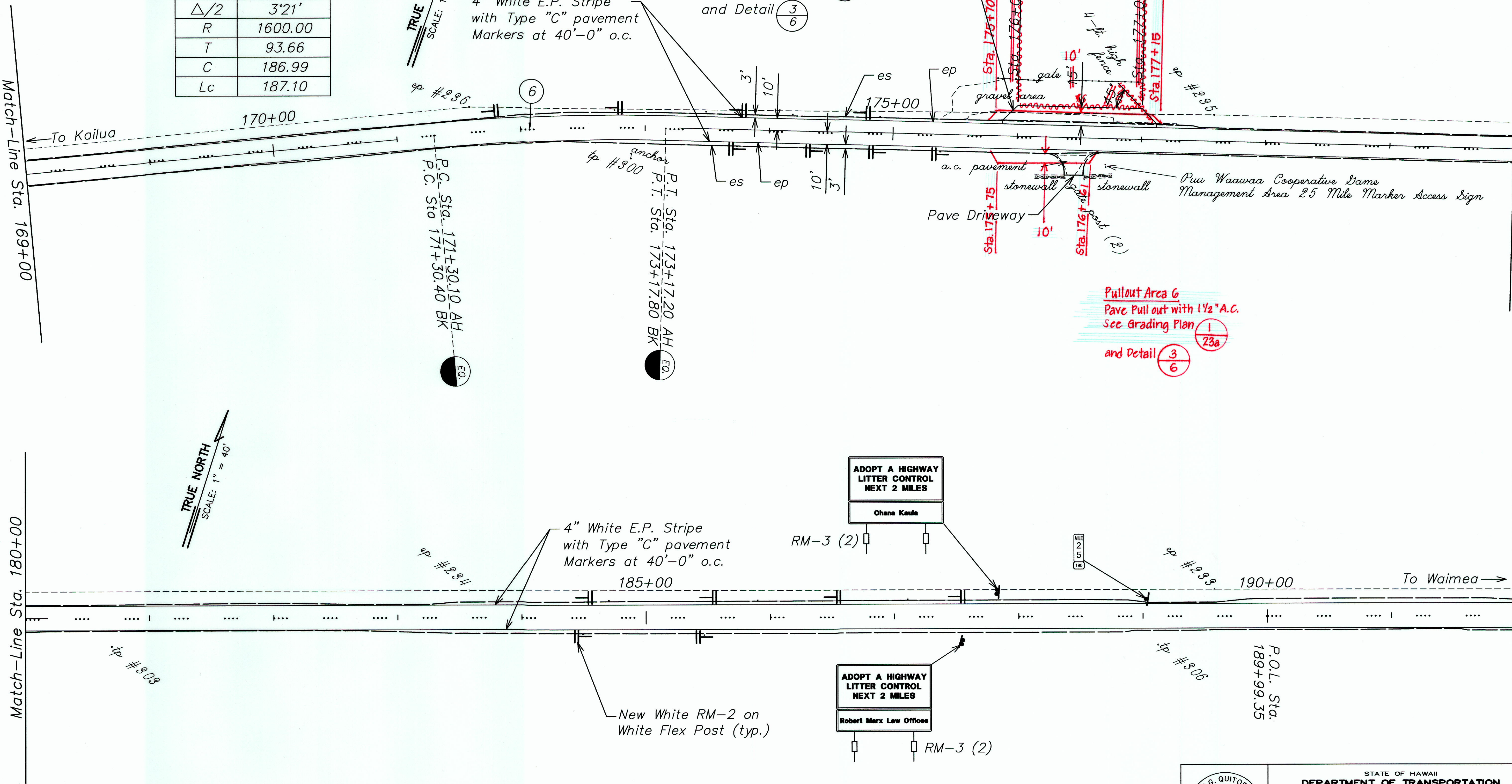
ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

Match-Line Sta. 169+00

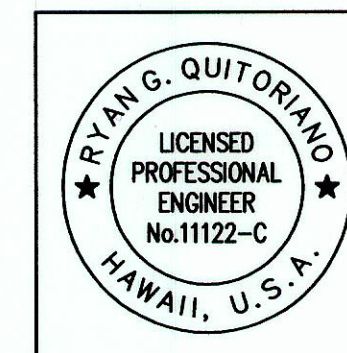
Match-Line Sta. 180+00

Match-Line Sta. 180+00

Match-Line Sta. 192+00



40' 0 40' 80'
SCALE: 1" = 40'

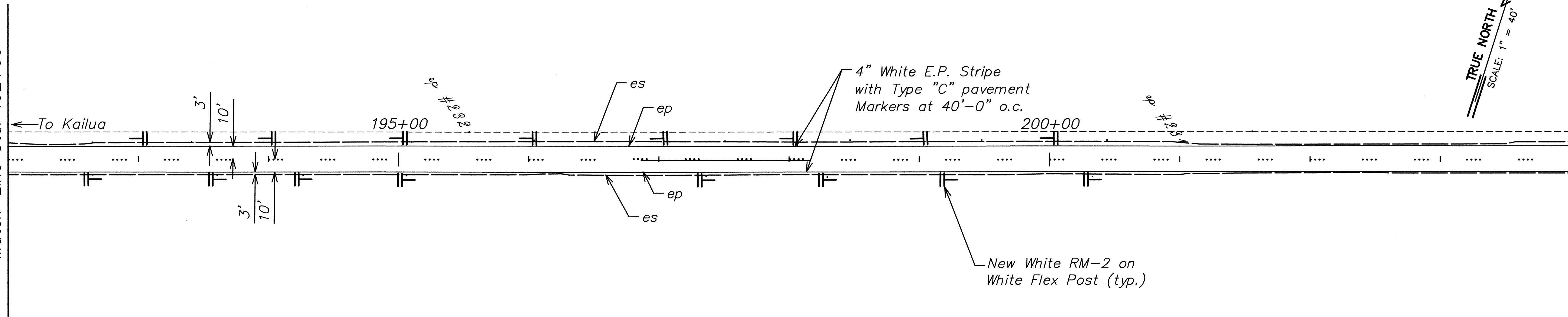


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
STA. 168+00 TO STA. 192+00
MAMALAHOA HIGHWAY PAVEMENT
PREVENTIVE MAINTENANCE
Puu Waawaa Ranch to Kaupulehu
Project No. 190B-02-04M
Scale: As Shown Date: April 2006
SHEET NO. 6 OF 14 SHEETS

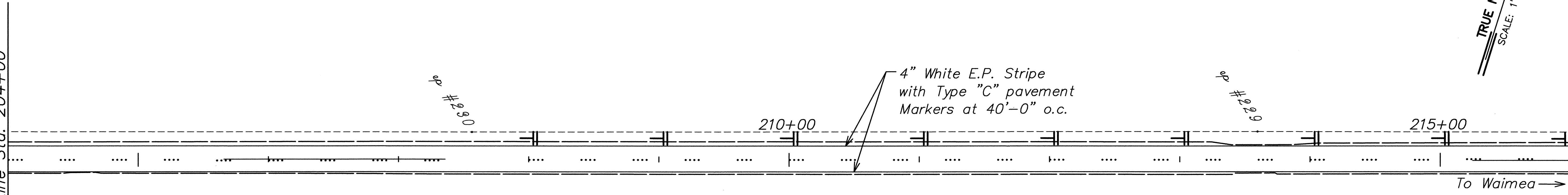
"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	14	30

Match-Line Sta. 192+00



Match-Line Sta. 204+00



Match-Line Sta. 204+00

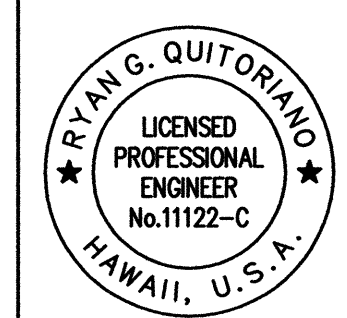
Match-Line Sta. 216+00

Sheet Title: ROADWAY PLAN
Last Save by: RCq
Last Saved: 4/14/2006
Plotted on: 5/4/2006

G:\DOT\04-02\ACAD\ROUTE190\dwg\Sheets\DOT04214.dwg

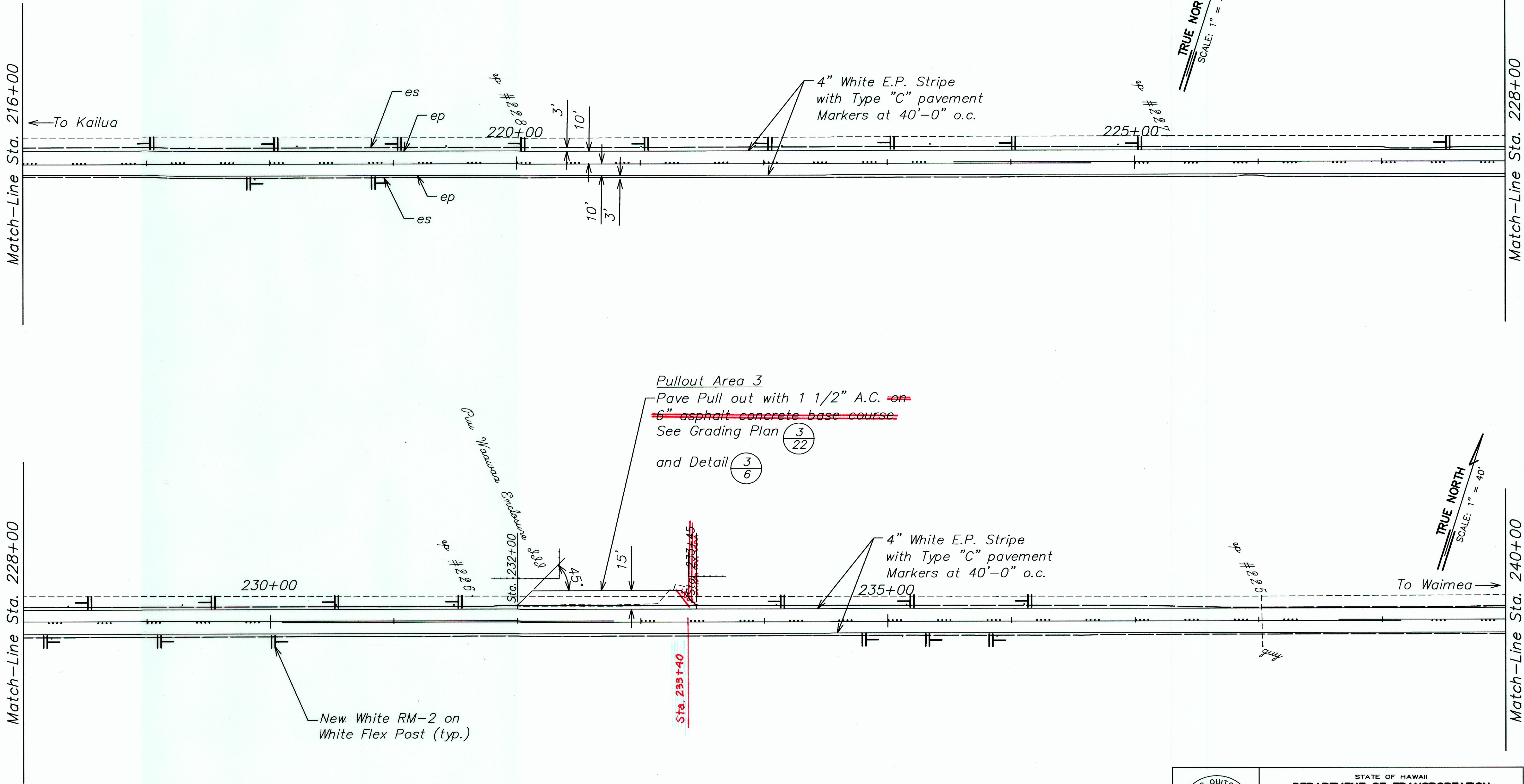
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NO.	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

40' 0 40' 80'
SCALE: 1" = 40'



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
STA. 192+00 TO STA. 216+00
MAMALAHOA HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Puu Waawaa Ranch to Kaupulehu
Project No. 190B-02-04M
Scale: As Shown Date: April 2006
SHEET NO. 7 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	15	30



Sheet Title: ROADWAY PLAN
 Last Save by: RGQ
 Last Saved: 4/14/2006
 Plotted on: 5/4/2006

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DATE	CHECKED BY	DESIGNED BY	QUANTITIES BY	PLACED BY	DRAWN BY	SURVEY PLOTTED BY

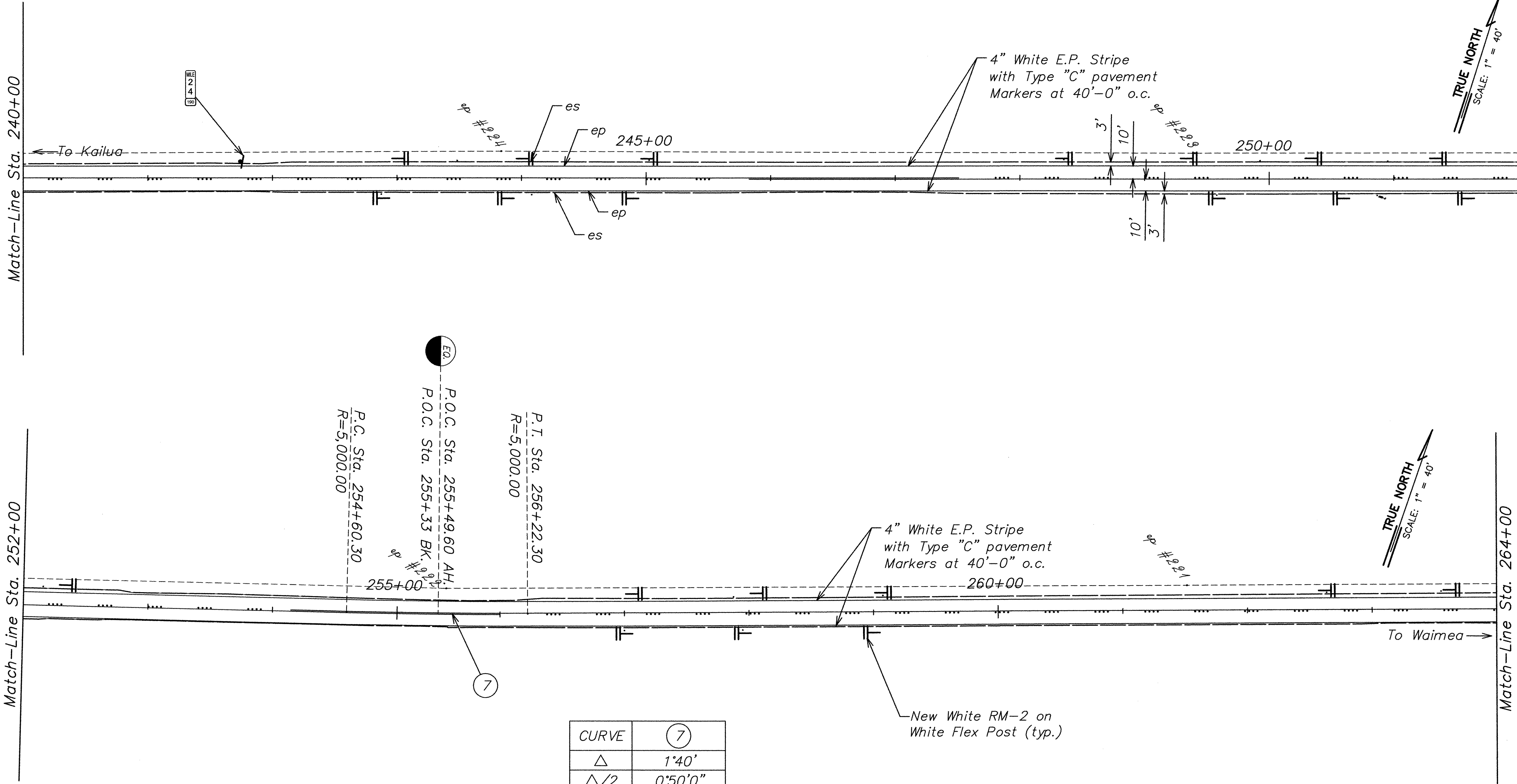


STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLAN
 STA. 216+00 TO STA. 240+00
 MAMALAOHUA HIGHWAY PAVEMENT
 PREVENTIVE MAINTENANCE
 Puu Waawaa Ranch to Kaupulehu
 Project No. 190B-02-04M
 Scale: As Shown Date: April 2006
 SHEET NO. 8 OF 14 SHEETS

40' 0 40' 80'
 SCALE: 1" = 40'

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	16	30



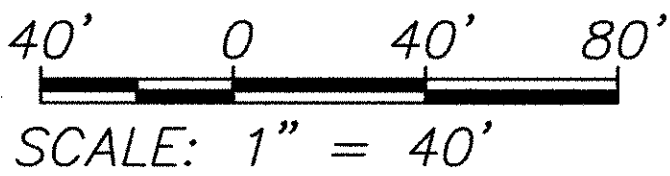
CURVE	7
Δ	1°40'
$\Delta/2$	0°50'0"
R	5000.00
T	72.73
C	145.44
Lc	145.44

Sheet Title: ROADWAY PLAN
 Last Save by: RGQ
 Last Saved: 4/14/2006
 Plotted on: 5/4/2006

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DATE	SURVEY PLOTTED BY
DATE	DRAWN BY
DATE	REVIEWED BY
DATE	CHECKED BY

ORIGINAL PLAN	NO.



STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLAN
 STA. 240+00 TO STA. 264+00
 MAMALAHOA HIGHWAY PAVEMENT
 PREVENTIVE MAINTENANCE
 Puu Waawaa Ranch to Kaupulehu
 Project No. 190B-02-04M
 Scale: As Shown Date: April 2006

SHEET NO. 9 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	17	30

Match-Line Sta. 264+00

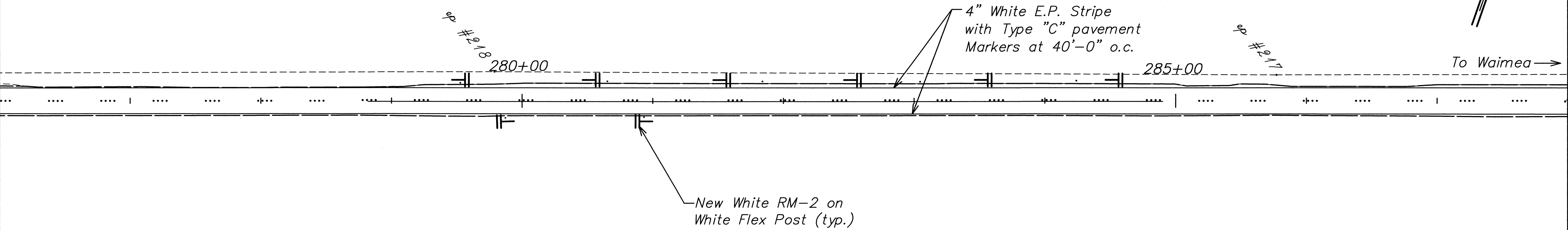
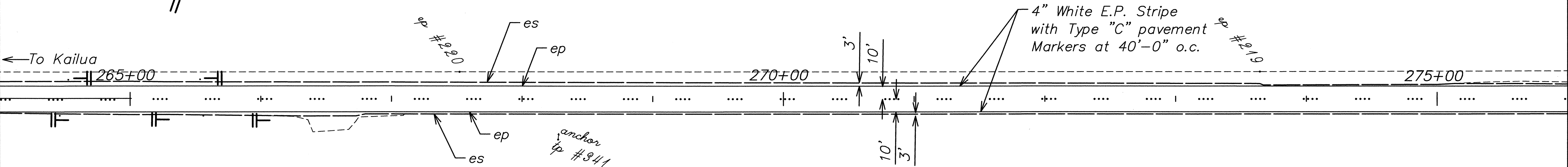
Match-Line Sta. 276+00

Match-Line Sta. 276+00

Match-Line Sta. 288+00

TRUE NORTH
SCALE: 1" = 40'

TRUE NORTH
SCALE: 1" = 40'



Sheet Title: ROADWAY PLAN
Last Save by: RCQ
Last Saved: 4/14/2006
Plotted on: 5/4/2006

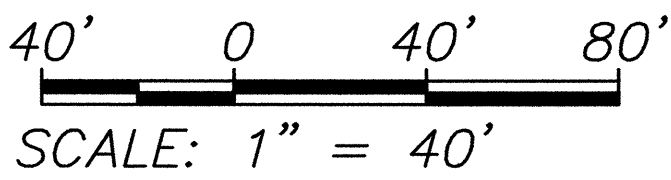
ORIGINAL PLAN	DATE
NO.	

SURVEY PLOTTED BY	DATE
NO.	

DESIGNED BY	DATE
NO.	

QUANTITIES BY	DATE
NO.	

CHECKED BY	DATE
NO.	

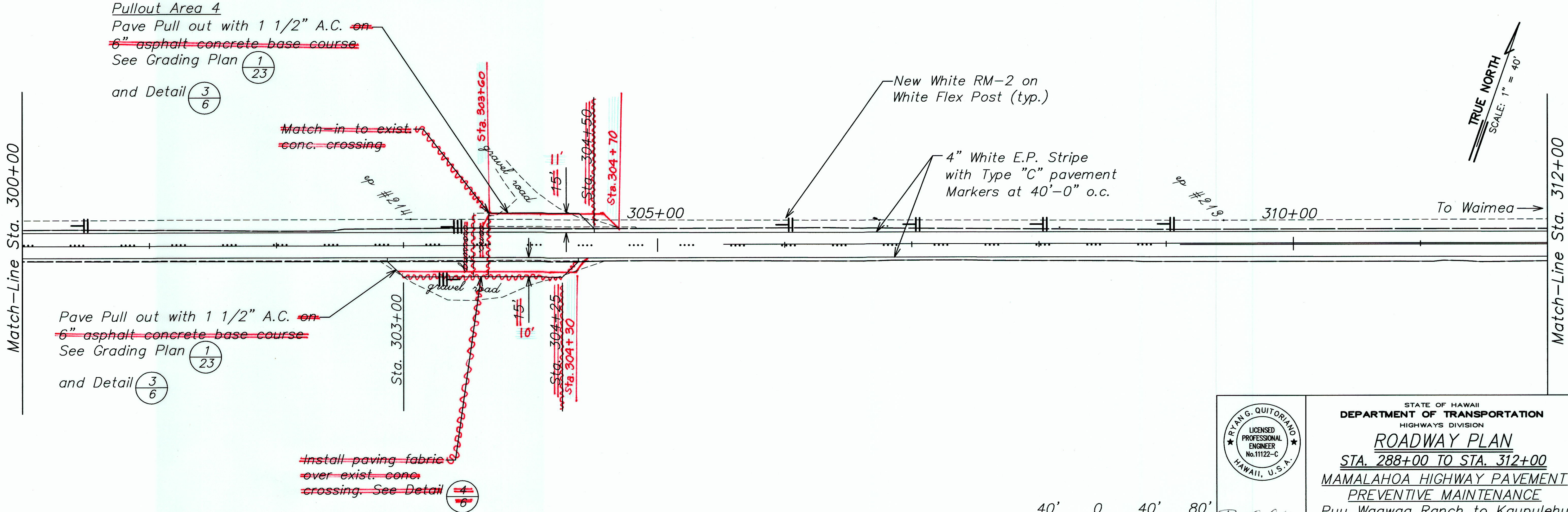
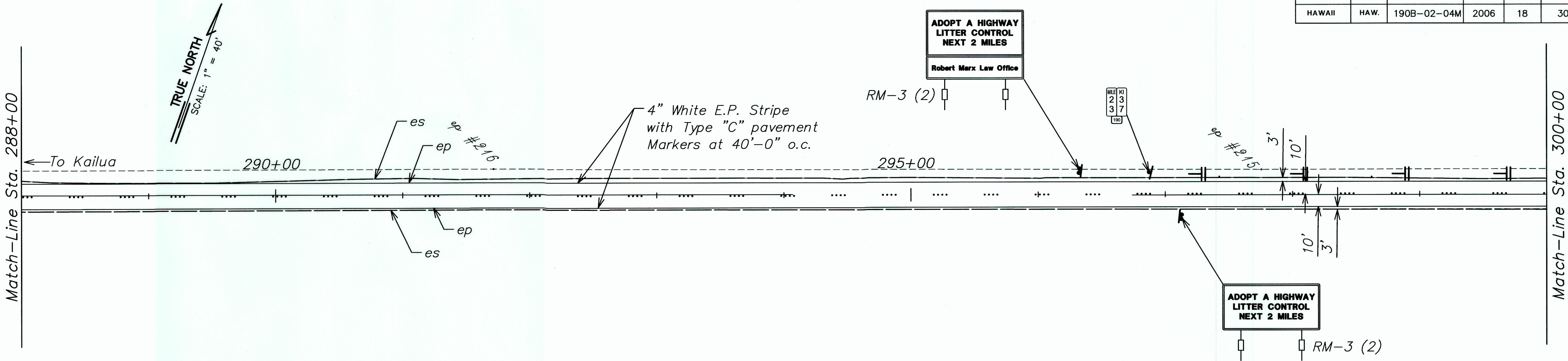


SCALE: 1" = 40'



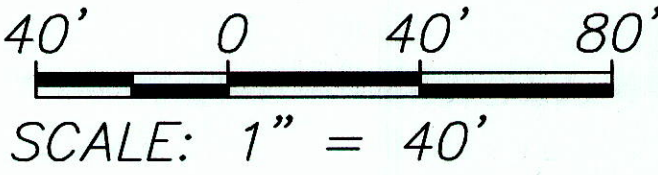
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
STA. 264+00 TO STA. 288+00
MAMALAHOA HIGHWAY PAVEMENT
PREVENTIVE MAINTENANCE
Puu Waawaa Ranch to Kaupulehu
Project No. 190B-02-04M
Scale: As Shown Date: April 2006
SHEET NO. 10 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	18	30



Sheet Title: ROADWAY PLAN
 Last Save by: RGQ
 Last Saved: 4/14/2006
 Plotted on: 5/4/2006

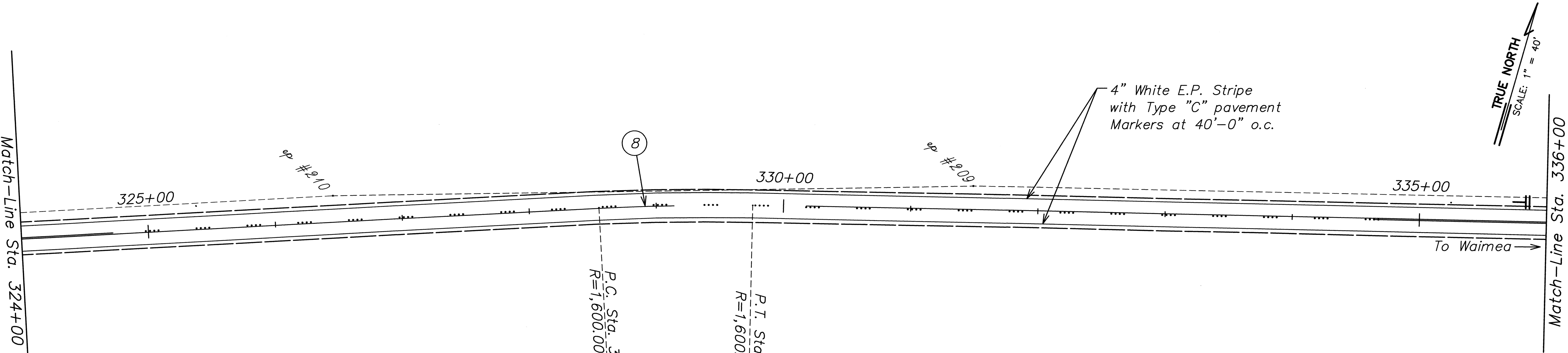
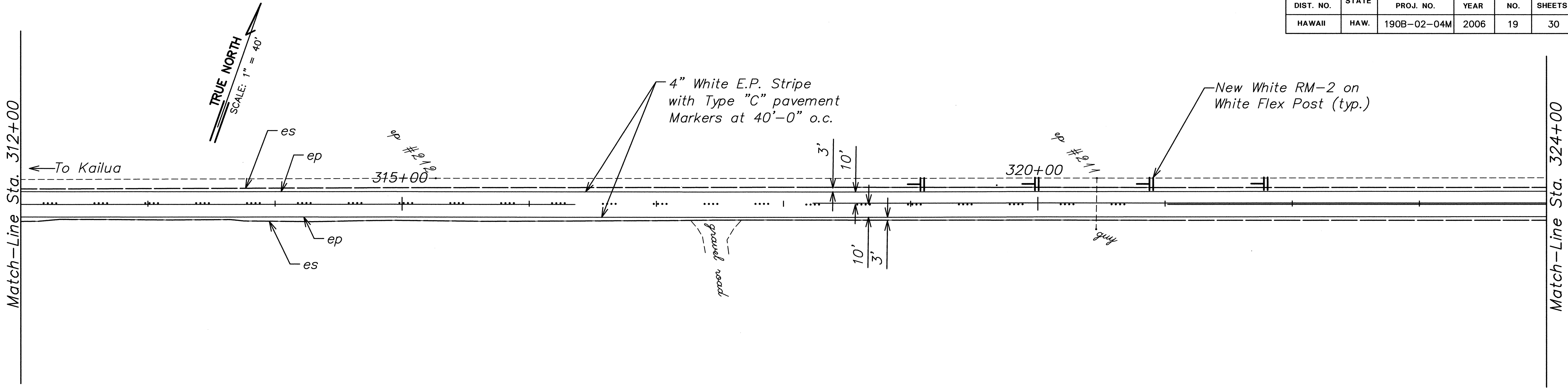
DATE	BY
DESIGNED BY	
DRAWN BY	
CHECKED BY	
NOTED BY	
APPROVED BY	



STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLAN
 STA. 288+00 TO STA. 312+00
 MAMALAHOA HIGHWAY PAVEMENT
 PREVENTIVE MAINTENANCE
 Puu Waawaa Ranch to Kaupulehu
 Project No. 190B-02-04M
 Scale: As Shown Date: April 2006
 SHEET NO. 11 OF 14 SHEETS

"AS-BUILT"

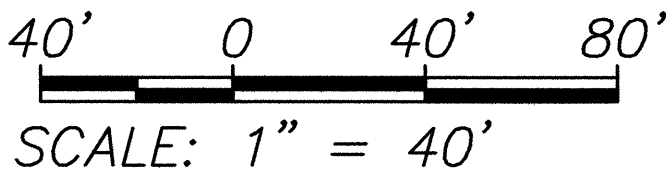
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	19	30



CURVE	8
Δ	4°20'
$\Delta/2$	2°10'
R	1600.00
T	60.53
C	120.98
Lc	121.01

Sheet Title: ROADWAY PLAN
 Last Save by: RCQ
 Last Saved: 4/14/2006
 Plotted on: 5/4/2006

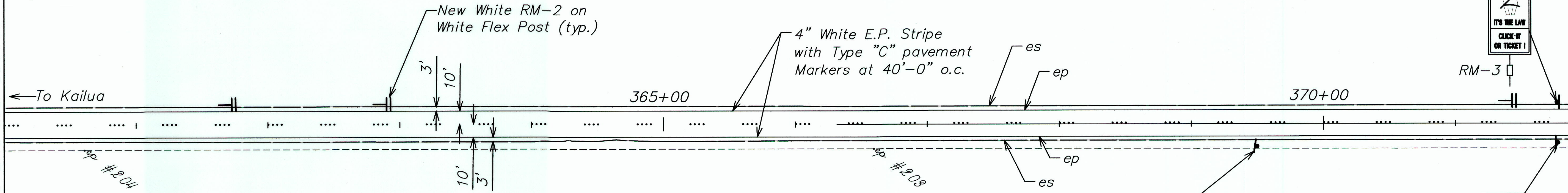
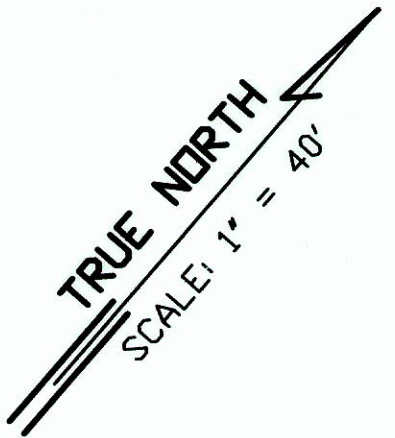
DATE	BY
DESIGNED BY	
DRAWN BY	
CHECKED BY	
NOTED BY	
NO.	



STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLAN
STA. 312+00 TO STA. 336+00
MAMALAHOA HIGHWAY PAVEMENT
PREVENTIVE MAINTENANCE
Puu Waawaa Ranch to Kaupulehu
Project No. 190B-02-04M
 Scale: As Shown Date: April 2006
SHEET NO. 12 OF 14 SHEETS

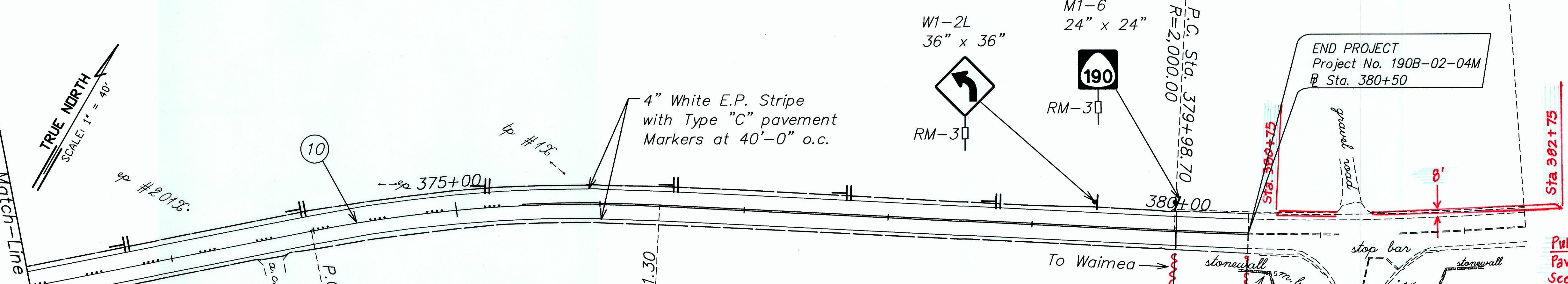
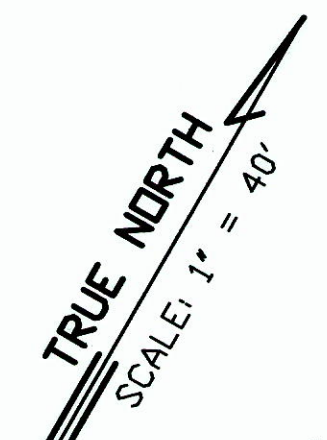
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	190B-02-04M	2006	21	30

Match-Line Sta. 360+00

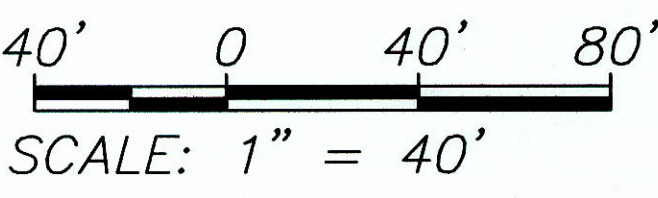


Match-Line Sta. 372+00

Match-Line Sta. 372+00



CURVE	(10)
Δ	13°55'
$\Delta/2$	6°57'30"
R	1000.00
T	122.05
C	242.30
Lc	242.89



RYAN G. QUITORIANO
LICENSED PROFESSIONAL ENGINEER
No. 11122-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
STA. 360+00 TO END

MAMALAHOA HIGHWAY PAVEMENT
PREVENTIVE MAINTENANCE
Puu Waawaa Ranch to Kaupulehu
Project No. 190B-02-04M
Scale: As Shown Date: April 2006

SHEET NO. 14 OF 14 SHEETS

Sheet Title: ROADWAY PLAN
Last Save by: RGQ
Last Saved: 4/14/2006
Plotted on: 5/4/2006
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DATE	SURVEY PLOTTED BY
DATE	DRAWN BY
DATE	DESIGNED BY
DATE	CHECKED BY
DATE	APPROVED BY

"AS-BUILT"