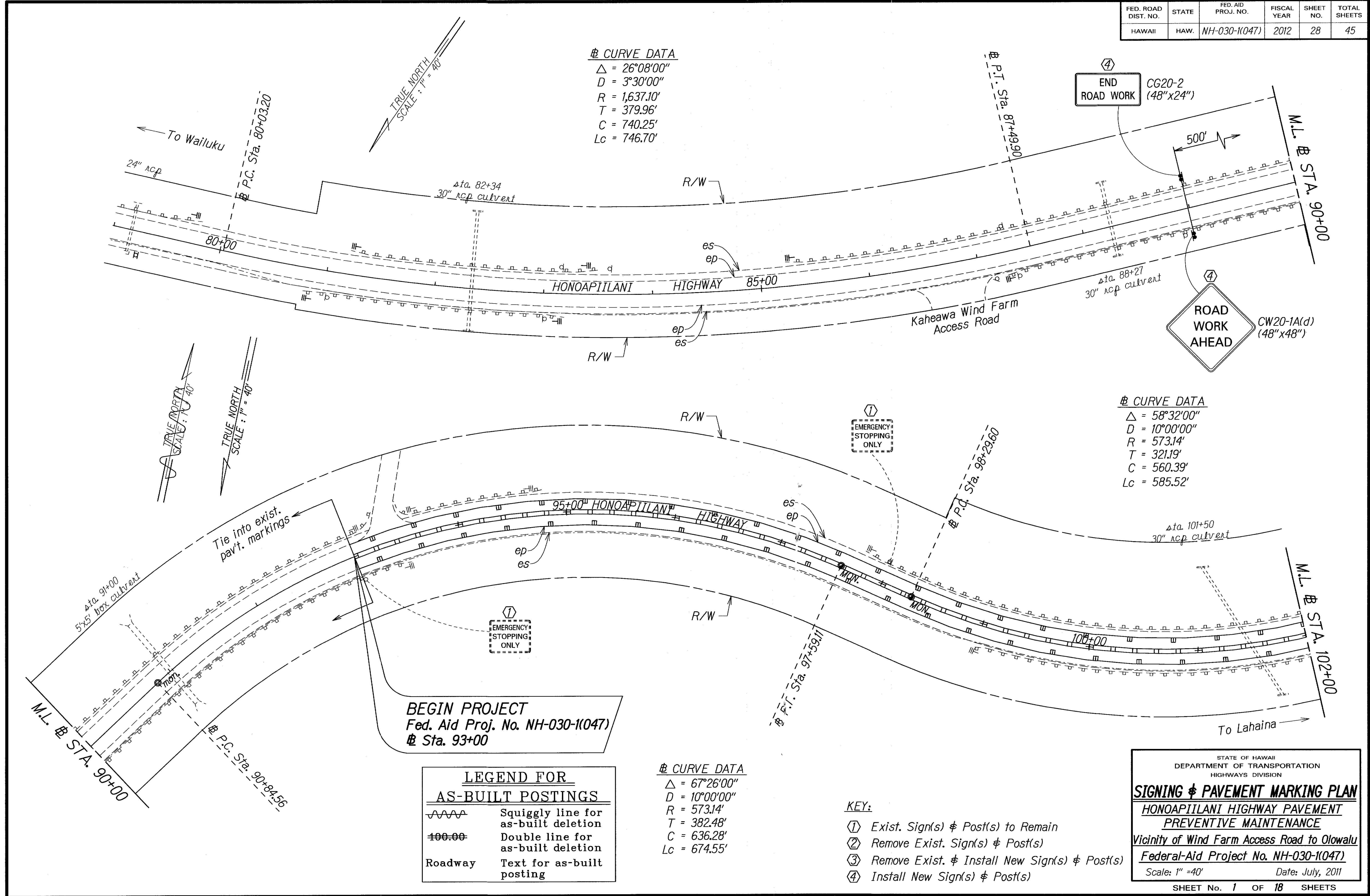


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(047)	2012	28	45

CURVE DATA
 $\Delta = 26^{\circ}08'00''$
 $D = 3^{\circ}30'00''$
 $R = 1,637.10'$
 $T = 379.96'$
 $C = 740.25'$
 $Lc = 746.70'$

CURVE DATA
 $\Delta = 58^{\circ}32'00''$
 $D = 10^{\circ}00'00''$
 $R = 573.14'$
 $T = 321.19'$
 $C = 560.39'$
 $Lc = 585.52'$

CURVE DATA
 $\Delta = 67^{\circ}26'00''$
 $D = 10^{\circ}00'00''$
 $R = 573.14'$
 $T = 382.48'$
 $C = 636.28'$
 $Lc = 674.55'$



BEGIN PROJECT
 Fed. Aid Proj. No. NH-030-1(047)
 # Sta. 93+00

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

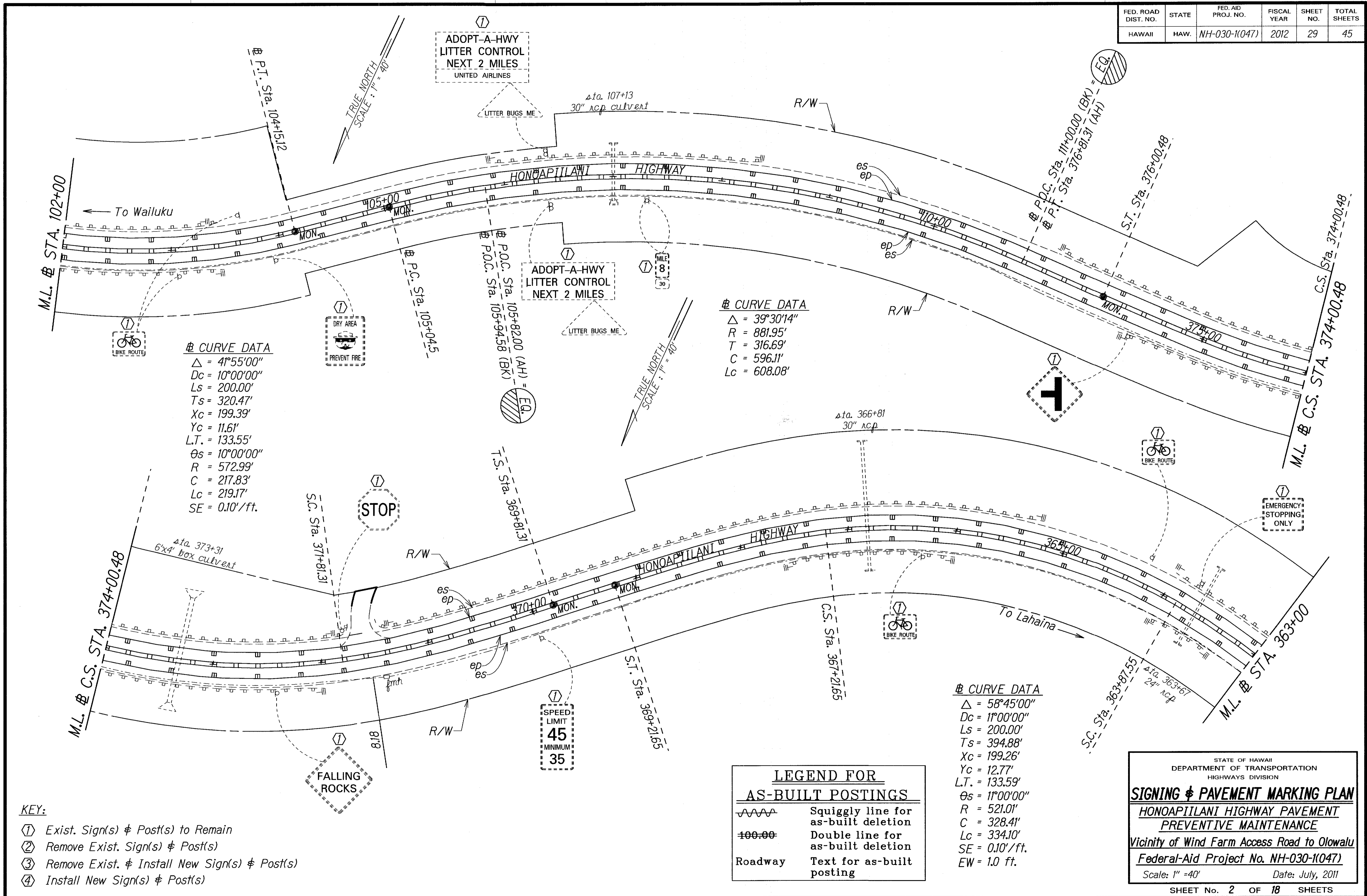
- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

SIGNING & PAVEMENT MARKING PLAN
 HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
 Vicinity of Wind Farm Access Road to Olowalu
 Federal-Aid Project No. NH-030-1(047)
 Scale: 1" = 40' Date: July, 2011
 SHEET No. 1 OF 18 SHEETS

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	
DATE	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(047)	2012	29	45



CURVE DATA
 $\Delta = 41^{\circ}55'00''$
 $Dc = 10^{\circ}00'00''$
 $Ls = 200.00'$
 $Ts = 320.47'$
 $Xc = 199.39'$
 $Yc = 11.61'$
 $L.T. = 133.55'$
 $\theta s = 10^{\circ}00'00''$
 $R = 572.99'$
 $C = 217.83'$
 $Lc = 219.17'$
 $SE = 0.10'/ft.$

CURVE DATA
 $\Delta = 39^{\circ}30'14''$
 $R = 881.95'$
 $T = 316.69'$
 $C = 596.11'$
 $Lc = 608.08'$

CURVE DATA
 $\Delta = 58^{\circ}45'00''$
 $Dc = 11^{\circ}00'00''$
 $Ls = 200.00'$
 $Ts = 394.88'$
 $Xc = 199.26'$
 $Yc = 12.77'$
 $L.T. = 133.59'$
 $\theta s = 11^{\circ}00'00''$
 $R = 521.01'$
 $C = 328.41'$
 $Lc = 334.10'$
 $SE = 0.10'/ft.$
 $EW = 1.0 ft.$

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Remove Exist. Sign(s) & Post(s)
 - ③ Remove Exist. & Install New Sign(s) & Post(s)
 - ④ Install New Sign(s) & Post(s)

LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
	Text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & PAVEMENT MARKING PLAN
HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE
Vicinity of Wind Farm Access Road to Olowalu
Federal-Aid Project No. NH-030-1(047)
Scale: 1" = 40' Date: July, 2011

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

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(047)	2012	30	45

LEGEND FOR AS-BUILT POSTINGS

~~~~~ Squiggly line for as-built deletion

== Double line for as-built deletion

Roadway Text for as-built posting

**# CURVE DATA**

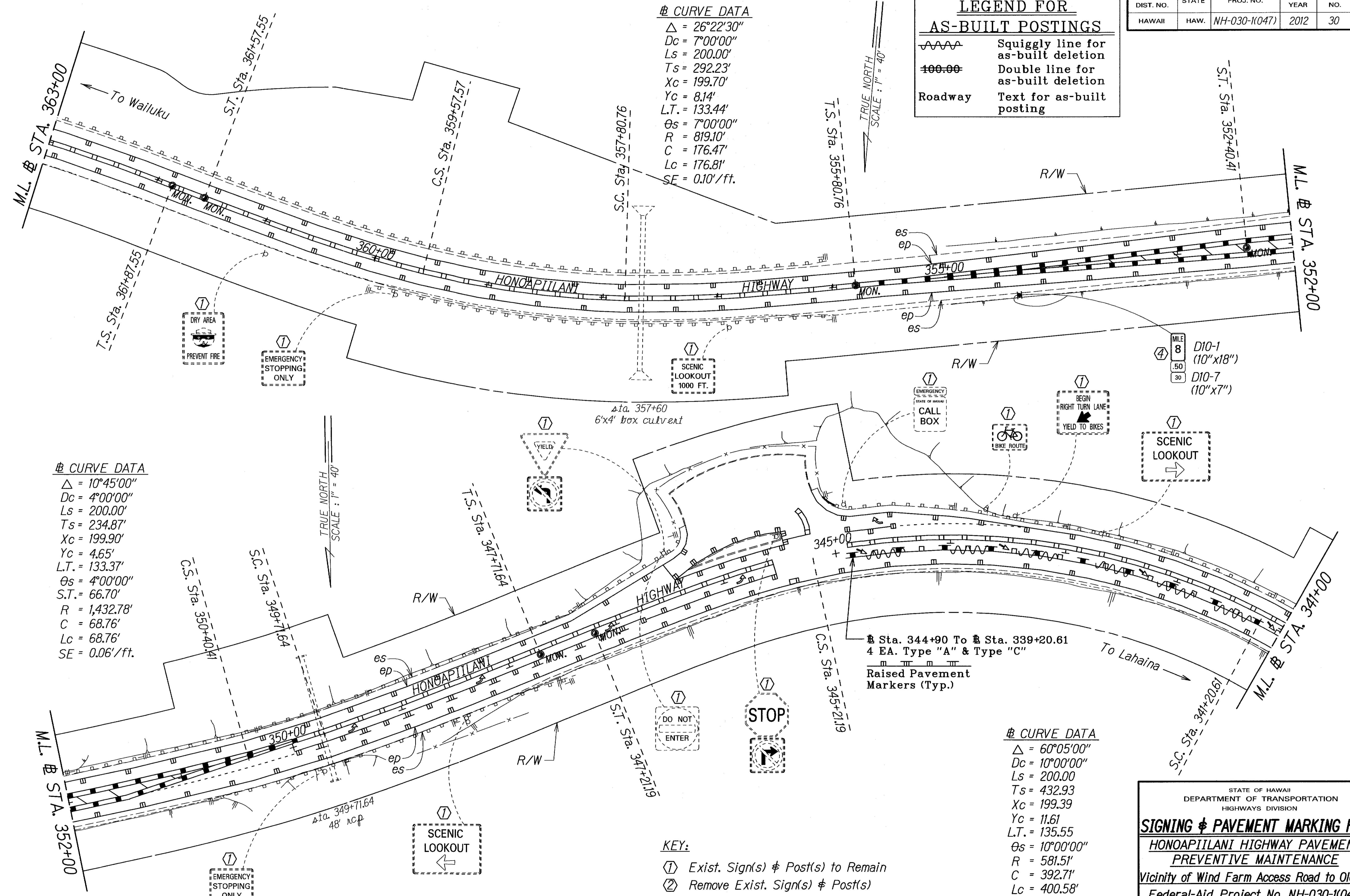
$\Delta = 26^{\circ}22'30''$   
 $Dc = 7^{\circ}00'00''$   
 $Ls = 200.00'$   
 $Ts = 292.23'$   
 $Xc = 199.70'$   
 $Yc = 8.14'$   
 $LT. = 133.44'$   
 $\theta s = 7^{\circ}00'00''$   
 $R = 819.10'$   
 $C = 176.47'$   
 $Lc = 176.81'$   
 $SE = 0.10'/ft.$

**# CURVE DATA**

$\Delta = 10^{\circ}45'00''$   
 $Dc = 4^{\circ}00'00''$   
 $Ls = 200.00'$   
 $Ts = 234.87'$   
 $Xc = 199.90'$   
 $Yc = 4.65'$   
 $LT. = 133.37'$   
 $\theta s = 4^{\circ}00'00''$   
 $S.T. = 66.70'$   
 $R = 1,432.78'$   
 $C = 68.76'$   
 $Lc = 68.76'$   
 $SE = 0.06'/ft.$

**# CURVE DATA**

$\Delta = 60^{\circ}05'00''$   
 $Dc = 10^{\circ}00'00''$   
 $Ls = 200.00'$   
 $Ts = 432.93'$   
 $Xc = 199.39'$   
 $Yc = 11.61'$   
 $LT. = 135.55'$   
 $\theta s = 10^{\circ}00'00''$   
 $R = 581.51'$   
 $C = 392.71'$   
 $Lc = 400.58'$   
 $SE = 0.10'/ft.$



- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
  - ④ Install New Sign(s) & Post(s)

|                   |          |
|-------------------|----------|
| DATE              | 7/10/12  |
| SURVEY PLOTTED BY | JG       |
| DRAWN BY          | JG       |
| NOTE BOOK         | 10/12/11 |
| DESIGNED BY       | JG       |
| CHECKED BY        | JG       |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

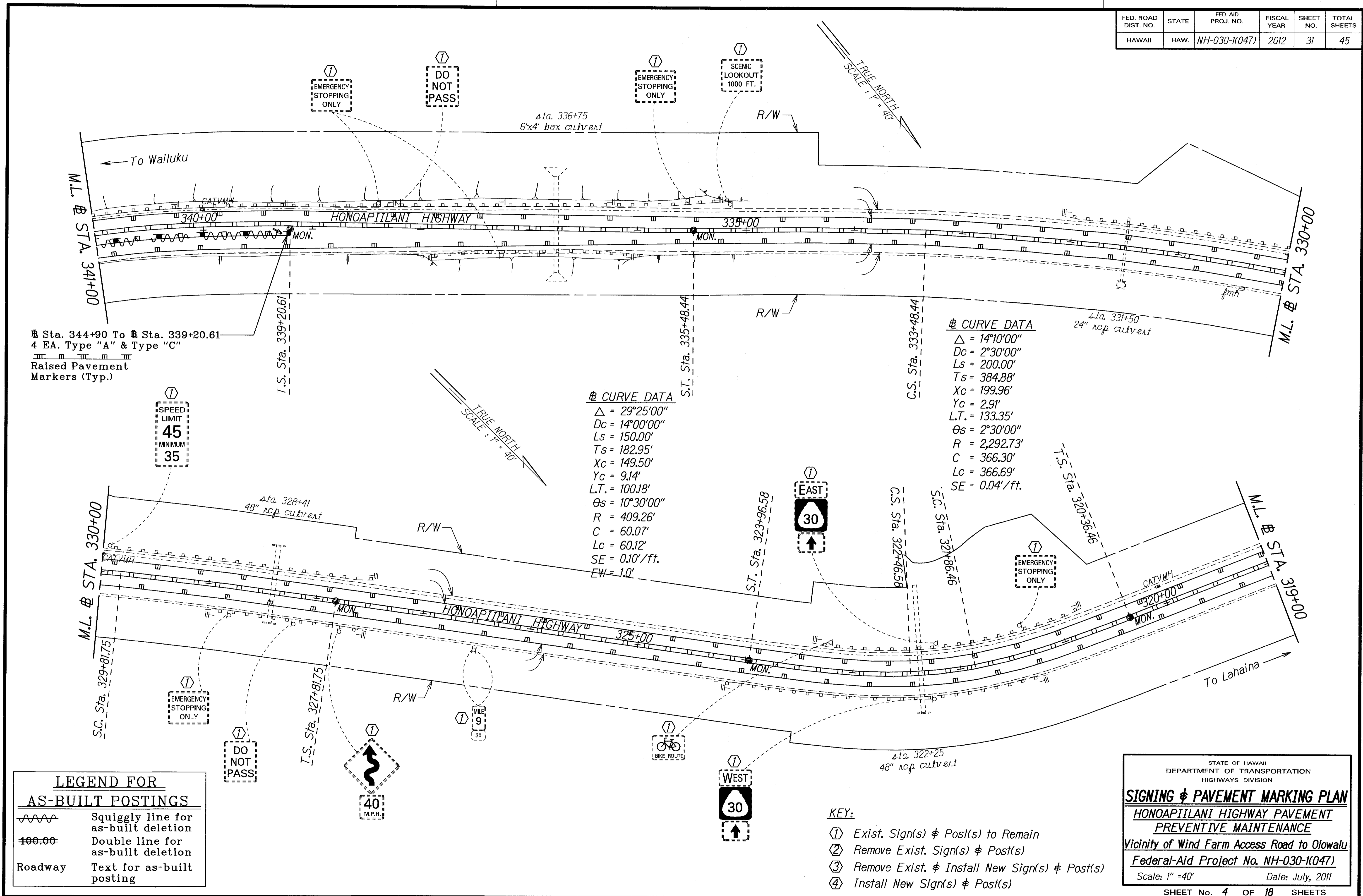
**HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE**

Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1(047)

Scale: 1" = 40' Date: July, 2011

SHEET No. 3 OF 18 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 31        | 45           |



Sta. 344+90 To Sta. 339+20.61  
 4 EA. Type "A" & Type "C"  
 Raised Pavement  
 Markers (Typ.)

**④ CURVE DATA**  
 $\Delta = 29^{\circ}25'00''$   
 $Dc = 14^{\circ}00'00''$   
 $Ls = 150.00'$   
 $Ts = 182.95'$   
 $Xc = 149.50'$   
 $Yc = 9.14'$   
 $L.T. = 100.18'$   
 $\theta s = 10^{\circ}30'00''$   
 $R = 409.26'$   
 $C = 60.07'$   
 $Lc = 60.12'$   
 $SE = 0.10'/ft.$   
 $EW = 1.0'$

**④ CURVE DATA**  
 $\Delta = 14^{\circ}10'00''$   
 $Dc = 2^{\circ}30'00''$   
 $Ls = 200.00'$   
 $Ts = 384.88'$   
 $Xc = 199.96'$   
 $Yc = 2.91'$   
 $L.T. = 133.35'$   
 $\theta s = 2^{\circ}30'00''$   
 $R = 2,292.73'$   
 $C = 366.30'$   
 $Lc = 366.69'$   
 $SE = 0.04'/ft.$

**LEGEND FOR AS-BUILT POSTINGS**

|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
  - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
**HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE**  
 Vicinity of Wind Farm Access Road to Olowalu  
 Federal-Aid Project No. NH-030-1(047)  
 Scale: 1" = 40' Date: July, 2011  
 SHEET No. 4 OF 18 SHEETS

"AS-BUILT"

|                   |      |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY          |      |
| DESIGNED BY       |      |
| QUANTITIES BY     |      |
| CHECKED BY        |      |
| ORIGINAL PLAN     |      |
| NOTE BOOK         |      |
| DESIGNED BY       |      |
| QUANTITIES BY     |      |
| CHECKED BY        |      |

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 32        | 45           |

**# CURVE DATA**

$\Delta = 61^{\circ}35'00''$   
 $Dc = 14^{\circ}00'00''$   
 $Ls = 150.00'$   
 $Ts = 320.17'$   
 $Xc = 149.50'$   
 $Yc = 9.14'$   
 $L.T. = 100.18'$   
 $\theta s = 10^{\circ}30'00''$   
 $R = 409.24'$   
 $C = 283.86'$   
 $Lc = 289.89'$   
 $SE = 0.10'/ft.$   
 $EW = 1.0'$

**# CURVE DATA**

$\Delta = 31^{\circ}35'00''$   
 $Dc = 14^{\circ}00'00''$   
 $Ls = 150.00'$   
 $Ts = 191.31'$   
 $Xc = 149.50'$   
 $Yc = 9.14'$   
 $L.T. = 100.18'$   
 $\theta s = 10^{\circ}30'00''$   
 $R = 409.18'$   
 $C = 75.49'$   
 $Lc = 75.60'$   
 $SE = 0.10'/ft.$   
 $EW = 1.0'$

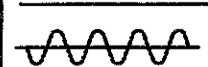
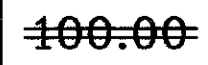
**# CURVE DATA**

$\Delta = 52^{\circ}30'00''$   
 $Dc = 14^{\circ}00'00''$   
 $Ls = 150.00'$   
 $Ts = 227.88'$   
 $Xc = 149.50'$   
 $Yc = 9.14'$   
 $L.T. = 100.18'$   
 $\theta s = 10^{\circ}30'00''$   
 $R = 409.26'$   
 $C = 222.19'$   
 $Lc = 225.02'$   
 $SE = 0.10'/ft.$   
 $EW = 1.0'$

**# CURVE DATA**

$\Delta = 66^{\circ}25'00''$   
 $Dc = 14^{\circ}00'00''$   
 $Ls = 150.00'$   
 $Ts = 344.32'$   
 $Xc = 149.50'$   
 $Yc = 9.14'$   
 $L.T. = 100.18'$   
 $\theta s = 10^{\circ}30'00''$   
 $R = 409.26'$   
 $C = 315.99'$   
 $Lc = 324.42'$   
 $SE = 0.10'/ft.$   
 $EW = 1.0'$

**LEGEND FOR AS-BUILT POSTINGS**

-  Squiggly line for as-built deletion
-  Double line for as-built deletion
- Roadway Text for as-built posting

**KEY:**

- ① Exist. Sign(s) & Post(s) to Remain
- ② Remove Exist. Sign(s) & Post(s)
- ③ Remove Exist. & Install New Sign(s) & Post(s)
- ④ Install New Sign(s) & Post(s)

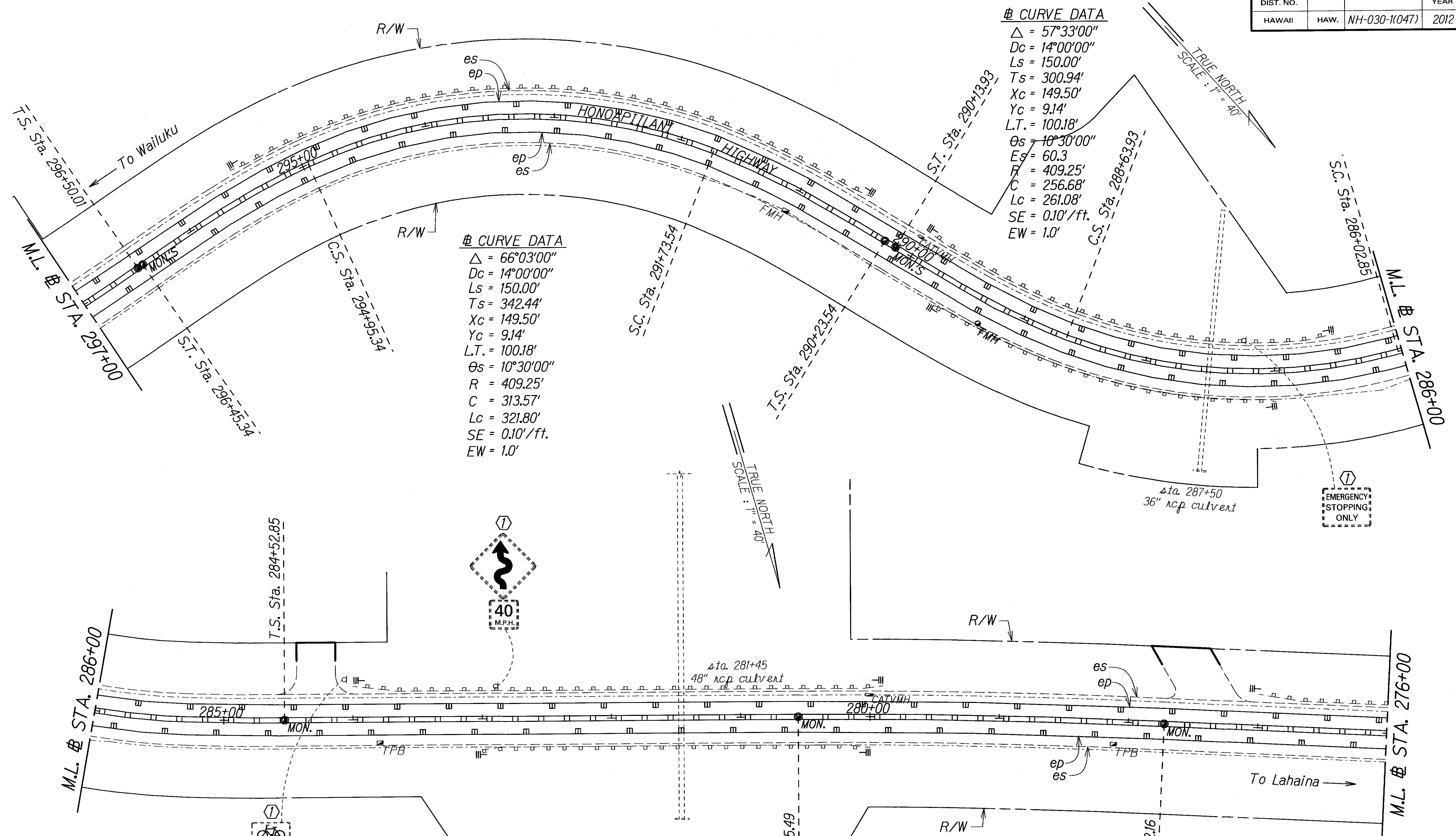
|                   |      |
|-------------------|------|
| ORIGINAL PLAN     | DATE |
| SURVEY PLOTTED BY |      |
| DRAWN BY          |      |
| TRACED BY         |      |
| DESIGNED BY       |      |
| NOTED BY          |      |
| REVISIONS BY      |      |
| CHECKED BY        |      |

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
HONOAPIILANI HIGHWAY PAVEMENT  
PREVENTIVE MAINTENANCE  
Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1(047)  
Scale: 1" = 40' Date: July, 2011  
SHEET No. 5 OF 18 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 33        | 45           |



**# CURVE DATA**  
 $\Delta = 57^{\circ}33'00''$   
 $D_c = 14^{\circ}00'00''$   
 $L_s = 150.00'$   
 $T_s = 300.94'$   
 $X_c = 149.50'$   
 $Y_c = 9.14'$   
 $L.T. = 100.18'$   
 $\theta_s = 10^{\circ}30'00''$   
 $E_s = 60.3$   
 $R = 409.25'$   
 $C = 256.68'$   
 $L_c = 261.08'$   
 $SE = 0.10'/ft.$   
 $EW = 1.0'$

**# CURVE DATA**  
 $\Delta = 66^{\circ}03'00''$   
 $D_c = 14^{\circ}00'00''$   
 $L_s = 150.00'$   
 $T_s = 342.44'$   
 $X_c = 149.50'$   
 $Y_c = 9.14'$   
 $L.T. = 100.18'$   
 $\theta_s = 10^{\circ}30'00''$   
 $R = 409.25'$   
 $C = 313.57'$   
 $L_c = 321.80'$   
 $SE = 0.10'/ft.$   
 $EW = 1.0'$

**# CURVE DATA**  
 $\Delta = 2^{\circ}50'00''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.58'$   
 $T = 141.70'$   
 $C = 283.30'$   
 $L_c = 283.33'$   
 $E = 1.75$

**LEGEND FOR AS-BUILT POSTINGS**

|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
  - ④ Install New Sign(s) & Post(s)

DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]  
 DATE: 7/20/11

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

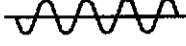
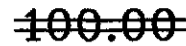
**SIGNING & PAVEMENT MARKING PLAN**  
**HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE**  
 Vicinity of Wind Farm Access Road to Olowalu  
 Federal-Aid Project No. NH-030-1(047)  
 Scale: 1" = 40' Date: July, 2011

SHEET No. 6 OF 18 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 34        | 45           |

**LEGEND FOR AS-BUILT POSTINGS**

 Squiggly line for as-built deletion  
 Double line for as-built deletion  
 Roadway Text for as-built posting

ADOPT-A-HWY LITTER CONTROL NEXT 2 MILES  
UNITED AIRLINES

EMERGENCY CALL BOX  
STATE OF HAWAII

LITTER BUGS ME

M.L. # STA. 276+00

R/W

To Wailuku

275+00 MON.

Adjust 5'x6' Concrete Slab

R/W

Sta. 271+64  
48" rcp culvert

40 M.P.H.

ADOPT-A-HWY LITTER CONTROL NEXT 2 MILES  
THROCKMORTON SRV & RPR

MILE 10  
30

LITTER BUGS ME

**# CURVE DATA**  
 $\Delta = 40^{\circ}02'00''$   
 $Dc = 16^{\circ}00'00''$   
 $Ls = 150.00'$   
 $Ts = 206.30'$   
 $Xc = 149.34'$   
 $Yc = 10.44'$   
 $L.T. = 100.23'$   
 $S.T. = 50.21'$   
 $\theta s = 12^{\circ}00'00''$   
 $R = 358.20'$   
 $C = 99.89'$   
 $Lc = 100.22'$   
 $SE = 0.10'/ft.$

**# CURVE DATA**  
 $\Delta = 50^{\circ}47'00''$   
 $Dc = 14^{\circ}00'00''$   
 $Ls = 150.00'$   
 $Ts = 270.26'$   
 $Xc = 149.50'$   
 $Yc = 9.14'$   
 $L.T. = 100.18'$   
 $S.T. = 50.16'$   
 $\theta s = 10^{\circ}30'00''$   
 $R = 409.23'$   
 $C = 210.35'$   
 $Lc = 212.74'$   
 $SE = 0.10'/ft.$

M.L. # STA. 265+00

S.T. Sta. 264+63.92

C.S. Sta. 263+13.92

S.C. Sta. 262+13.70

T.S. Sta. 260+63.70

40 M.P.H.

SOLAR PANEL ARRAY ENCLOSURE

Tie into Exist Pav't.  
Markings at Sta. 259+55  
Striping Exclusion

Sta. 259+25  
36" rcp culvert

Sta. 258+30

Tunnel Section

To Lahaina

M.L. # STA. 254+00

S.T. Sta. 254+58.94

Sta. 265+80  
Begin 8" White  
M.L. # STA. 265+00

|               |      |       |
|---------------|------|-------|
| ORIGINAL PLAN | DATE | SCALE |
| DESIGNED BY   |      |       |
| TRACED BY     |      |       |
| NOTE BOOK     |      |       |
| QUANTITIES BY |      |       |
| CHECKED BY    |      |       |

TUNNEL

EMERGENCY STOPPING ONLY

BIKE ROUTE  
WHEN FLASHING

TUNNEL

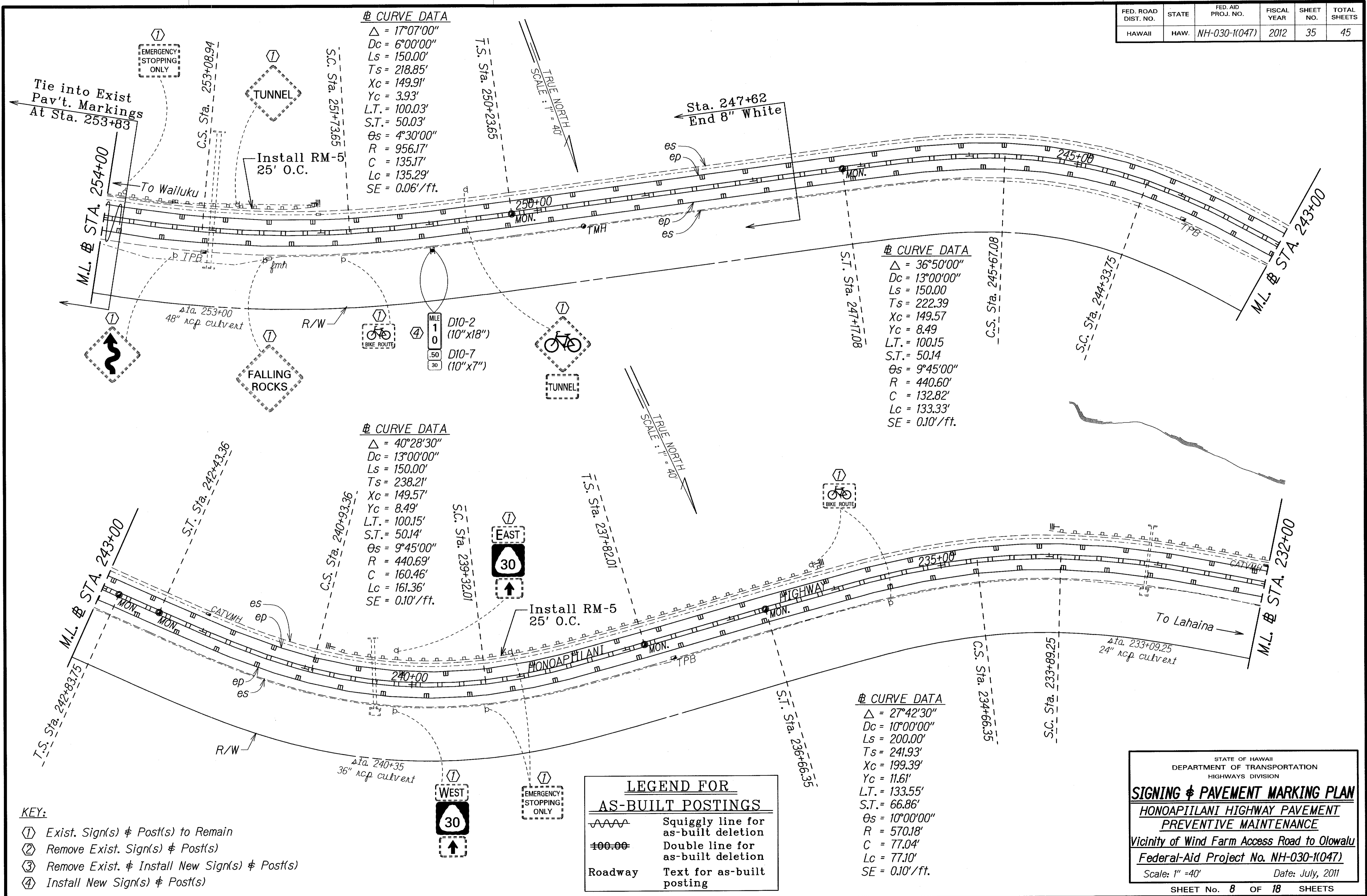
- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
  - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
**HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE**  
 Vicinity of Wind Farm Access Road to Olowalu  
 Federal-Aid Project No. NH-030-1(047)  
 Scale: 1" = 40' Date: July, 2011  
 SHEET No. 7 OF 18 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 35        | 45           |



- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
  - ④ Install New Sign(s) & Post(s)

**LEGEND FOR AS-BUILT POSTINGS**

|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

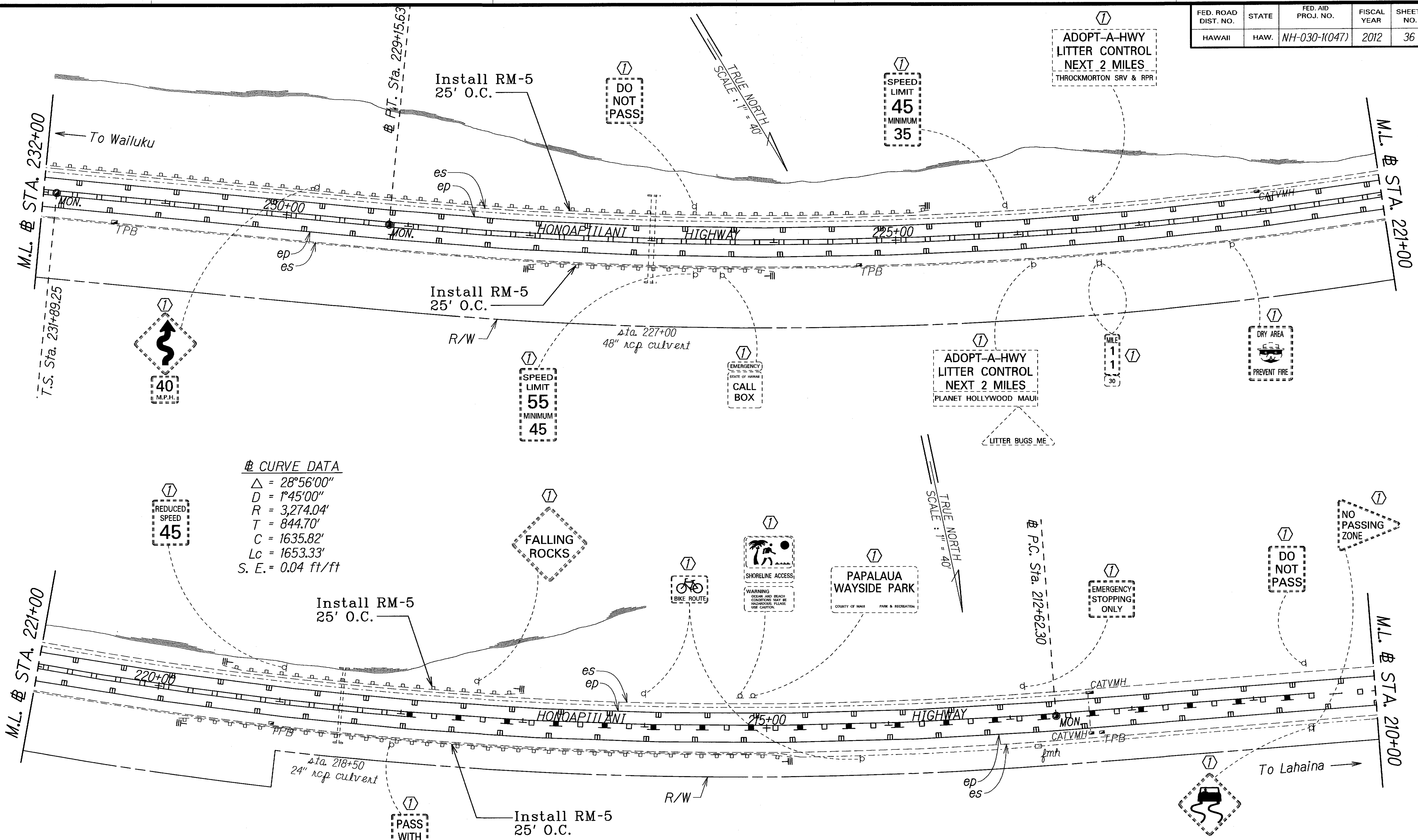
ORIGINAL PLAN  
 SURVEY PLOTTED BY  
 DRAWN BY  
 TRACED BY  
 DESIGNED BY  
 CHECKED BY

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
 HONOAPIILANI HIGHWAY PAVEMENT  
 PREVENTIVE MAINTENANCE  
 Vicinity of Wind Farm Access Road to Olowalu  
 Federal-Aid Project No. NH-030-1(047)  
 Scale: 1" = 40' Date: July, 2011

SHEET No. 8 OF 18 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 36        | 45           |



**## CURVE DATA**  
 $\Delta = 28^\circ 56' 00''$   
 $D = 1^\circ 45' 00''$   
 $R = 3,274.04'$   
 $T = 844.70'$   
 $C = 1635.82'$   
 $Lc = 1653.33'$   
 $S. E. = 0.04 \text{ ft/ft}$

**LEGEND FOR AS-BUILT POSTINGS**

|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
  - ④ Install New Sign(s) & Post(s)

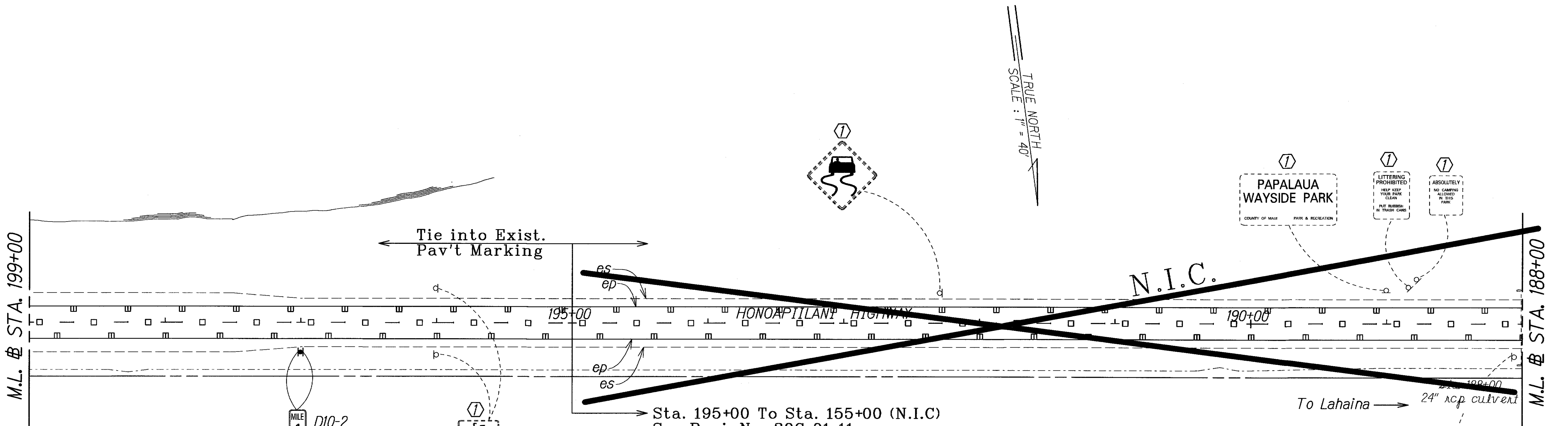
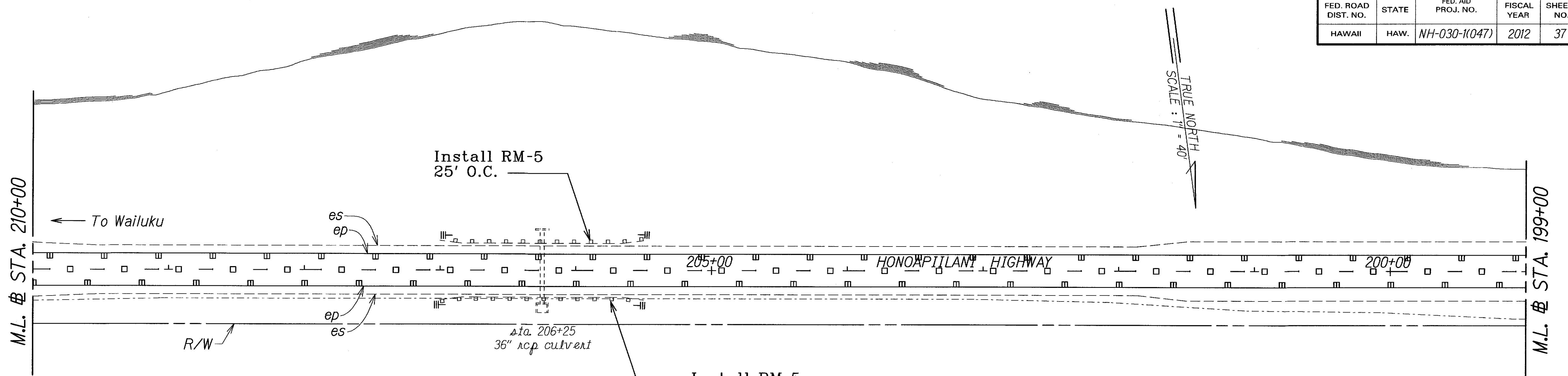
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE  
Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1(047)  
Scale: 1" = 40' Date: July, 2011

SHEET No. 9 OF 18 SHEETS

|                   |             |
|-------------------|-------------|
| ORIGINAL PLAN     | DATE        |
| SURVEY PLOTTED BY | Scale: 1/2" |
| DRAWN BY          |             |
| DESIGNED BY       |             |
| CHECKED BY        |             |
| NOTED BY          |             |
| DATE              |             |

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 37        | 45           |



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

|        |                 |
|--------|-----------------|
| MILE 1 | D10-2 (10"x18") |
| .50    | D10-7 (10"x7")  |
| 30     |                 |

**LEGEND FOR AS-BUILT POSTINGS**

|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
  - ④ Install New Sign(s) & Post(s)

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

**HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE**

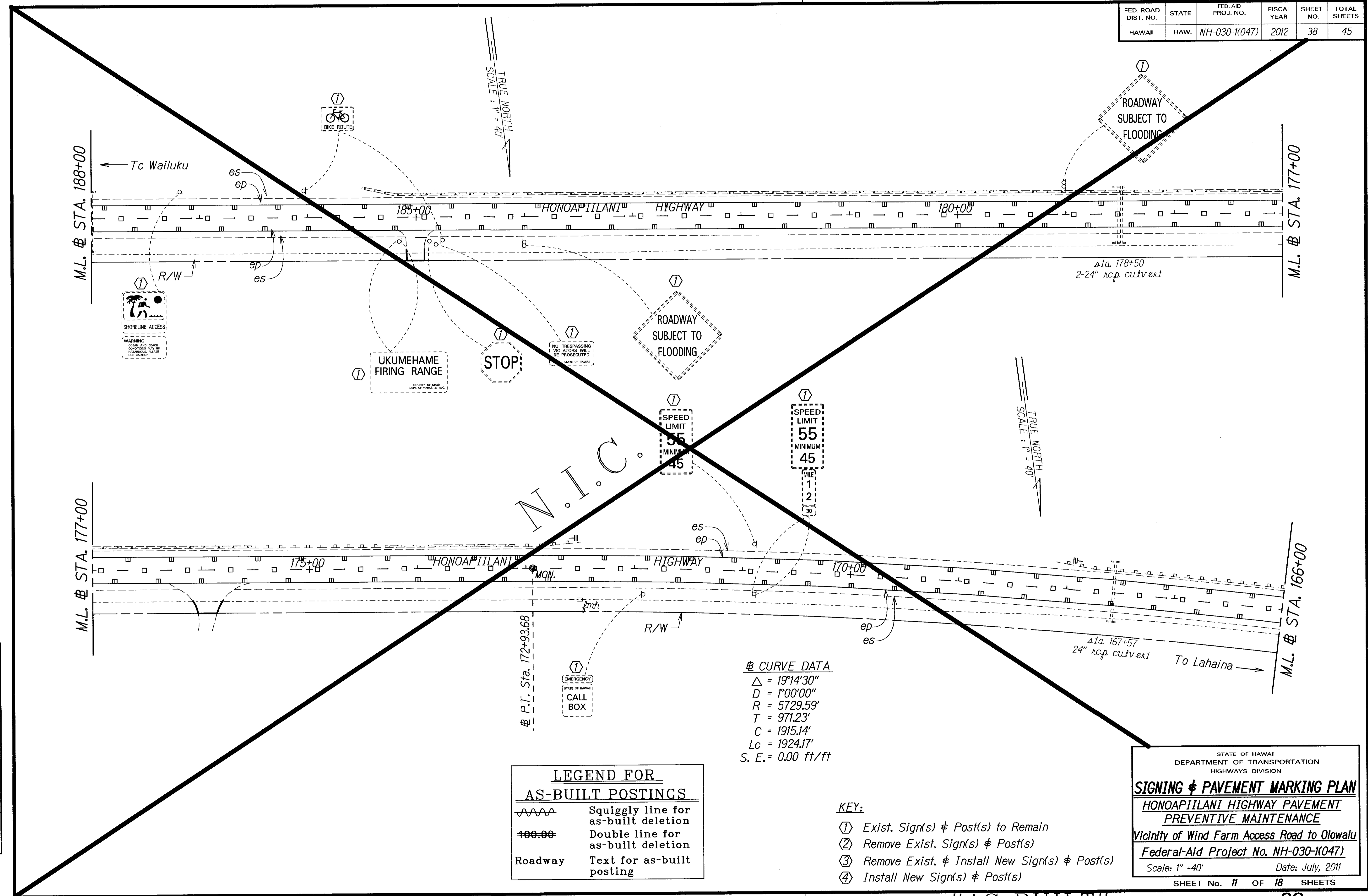
Vicinity of Wind Farm Access Road to Olowalu

Federal-Aid Project No. NH-030-1(047)

Scale: 1" = 40' Date: July, 2011

SHEET No. 10 OF 18 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 38        | 45           |



DATE: 5/24/12  
 SURVEY PLOTTED BY: [Signature]  
 ORIGINAL PLAN: [Signature]  
 TRACED BY: [Signature]  
 DESIGNED BY: [Signature]  
 CHECKED BY: [Signature]

**LEGEND FOR AS-BUILT POSTINGS**

|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

**CURVE DATA**  
 $\Delta = 19^{\circ}14'30''$   
 $D = 1^{\circ}00'00''$   
 $R = 5729.59'$   
 $T = 971.23'$   
 $C = 1915.14'$   
 $Lc = 1924.17'$   
 $S. E. = 0.00 \text{ ft/ft}$

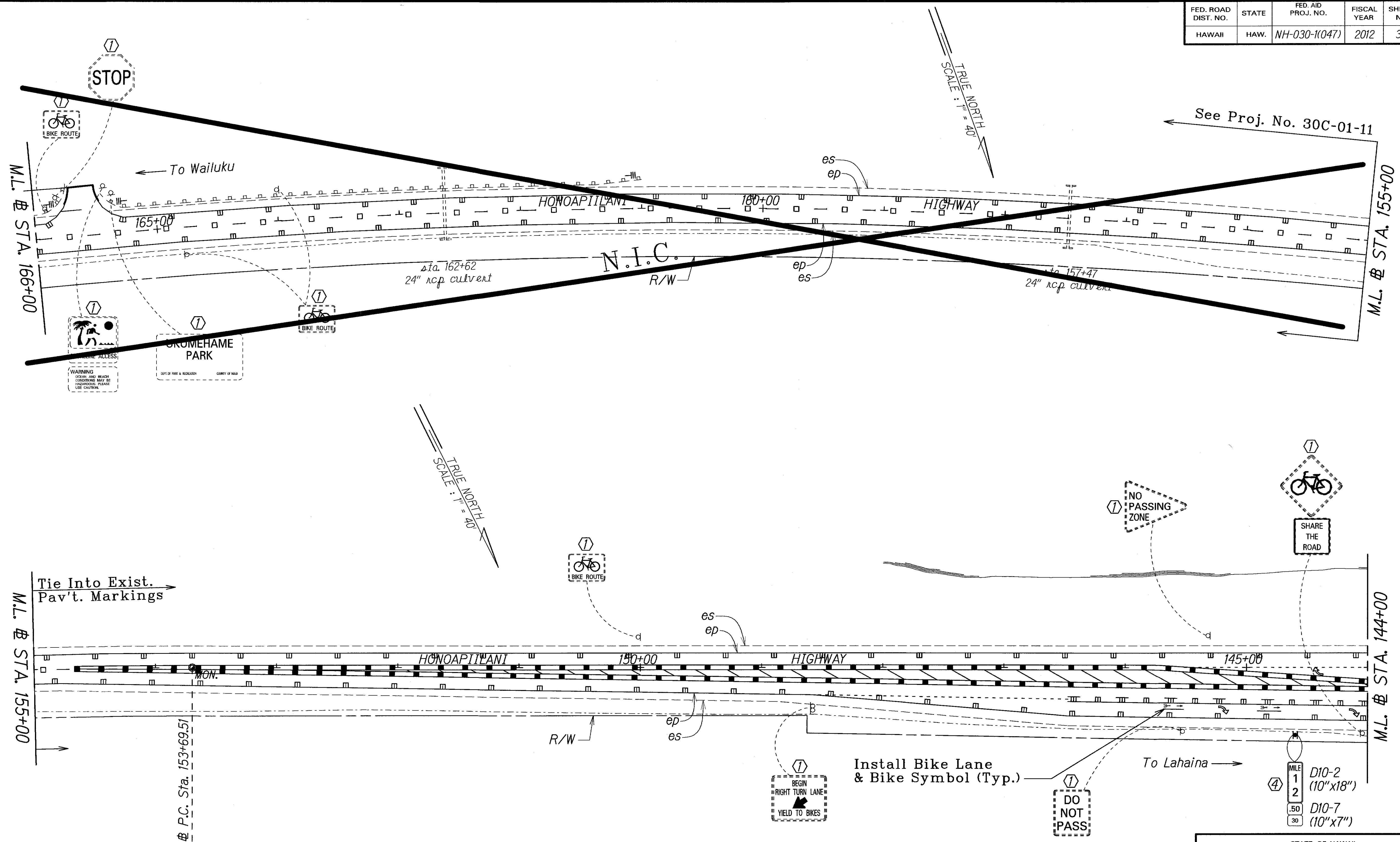
- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Remove Exist. Sign(s) & Post(s)
  - ③ Remove Exist. & Install New Sign(s) & Post(s)
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STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
 HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE  
 Vicinity of Wind Farm Access Road to Olowalu  
 Federal-Aid Project No. NH-030-1(047)  
 Scale: 1" = 40' Date: July, 2011

SHEET No. 11 OF 18 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 39        | 45           |



|               |                   |         |
|---------------|-------------------|---------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE    |
| NOTED BY      | DRAWN BY          | 5/27/11 |
| DESIGNED BY   | CHECKED BY        |         |
| APPROVED BY   |                   |         |

| LEGEND FOR AS-BUILT POSTINGS |                                     |
|------------------------------|-------------------------------------|
|                              | Squiggly line for as-built deletion |
|                              | Double line for as-built deletion   |
| Roadway                      | Text for as-built posting           |

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

**HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE**

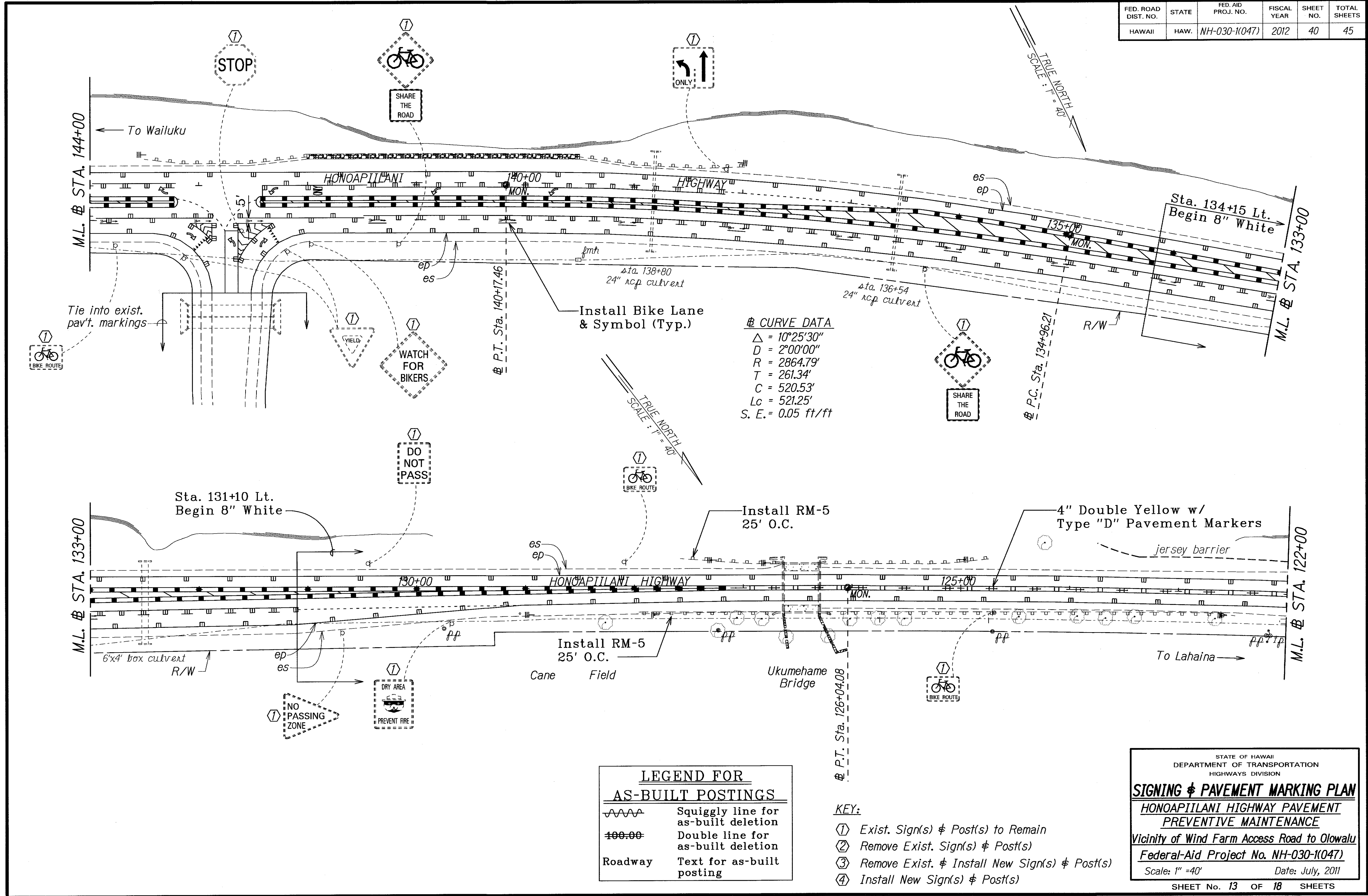
Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1(047)

Scale: 1" = 40'      Date: July, 2011

SHEET No. 12 OF 18 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 40        | 45           |



**CURVE DATA**  
 $\Delta = 10^{\circ}25'30''$   
 $D = 2^{\circ}00'00''$   
 $R = 2864.79'$   
 $T = 261.34'$   
 $C = 520.53'$   
 $Lc = 521.25'$   
 $S. E. = 0.05 \text{ ft/ft}$

**LEGEND FOR AS-BUILT POSTINGS**

|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
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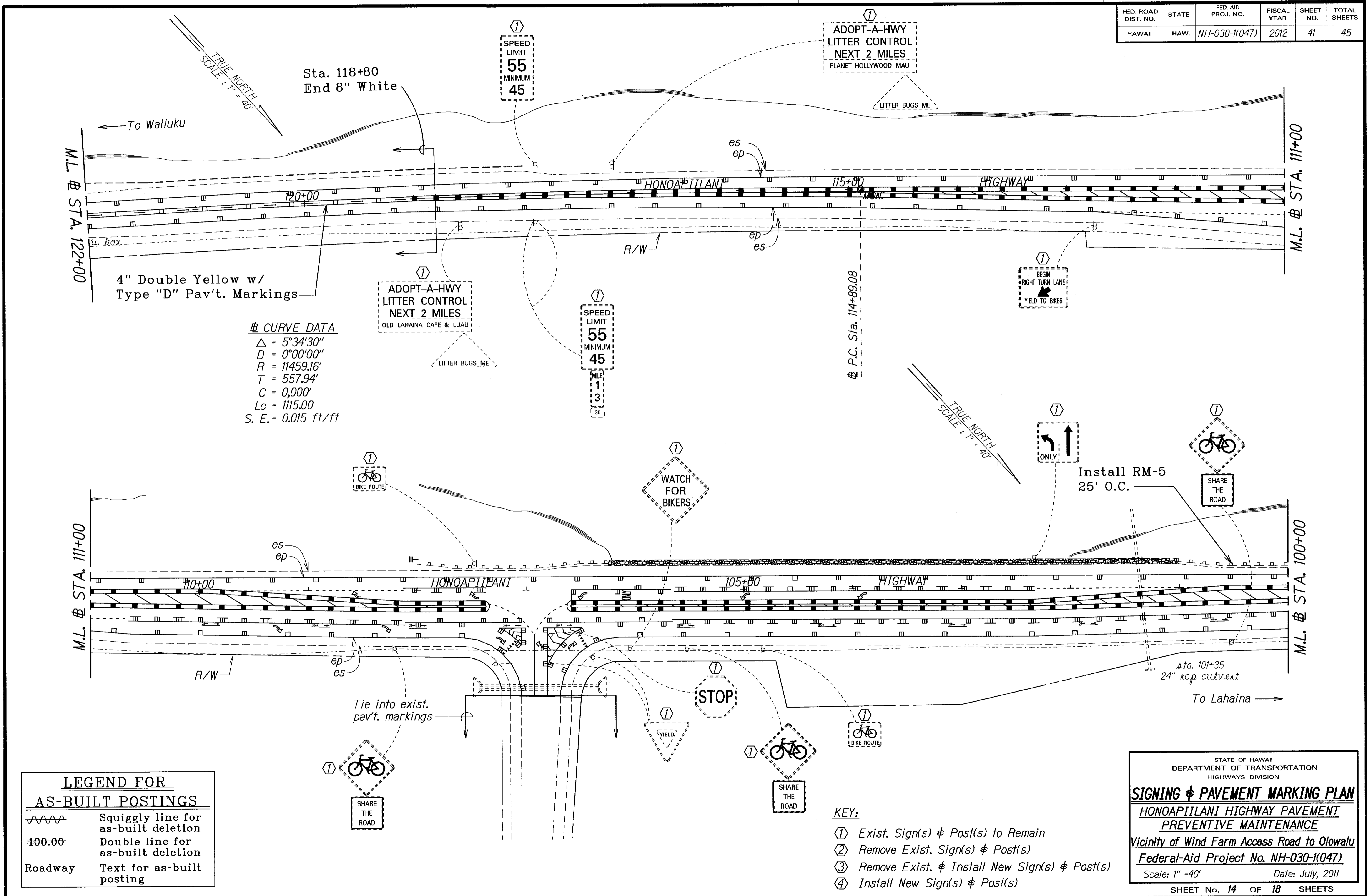
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE  
Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1(047)  
Scale: 1" = 40' Date: July, 2011

SHEET No. 13 OF 18 SHEETS

DATE: 5/24/11  
SURVEY PLOTTED BY: [blank]  
DRAWN BY: [blank]  
DESIGNED BY: [blank]  
CHECKED BY: [blank]

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 41        | 45           |



**CURVE DATA**  
 $\Delta = 5^{\circ}34'30''$   
 $D = 0^{\circ}00'00''$   
 $R = 11459.16'$   
 $T = 557.94'$   
 $C = 0.000'$   
 $Lc = 1115.00'$   
 $S. E. = 0.015 \text{ ft/ft}$

**LEGEND FOR AS-BUILT POSTINGS**

|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
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  - ④ Install New Sign(s) & Post(s)

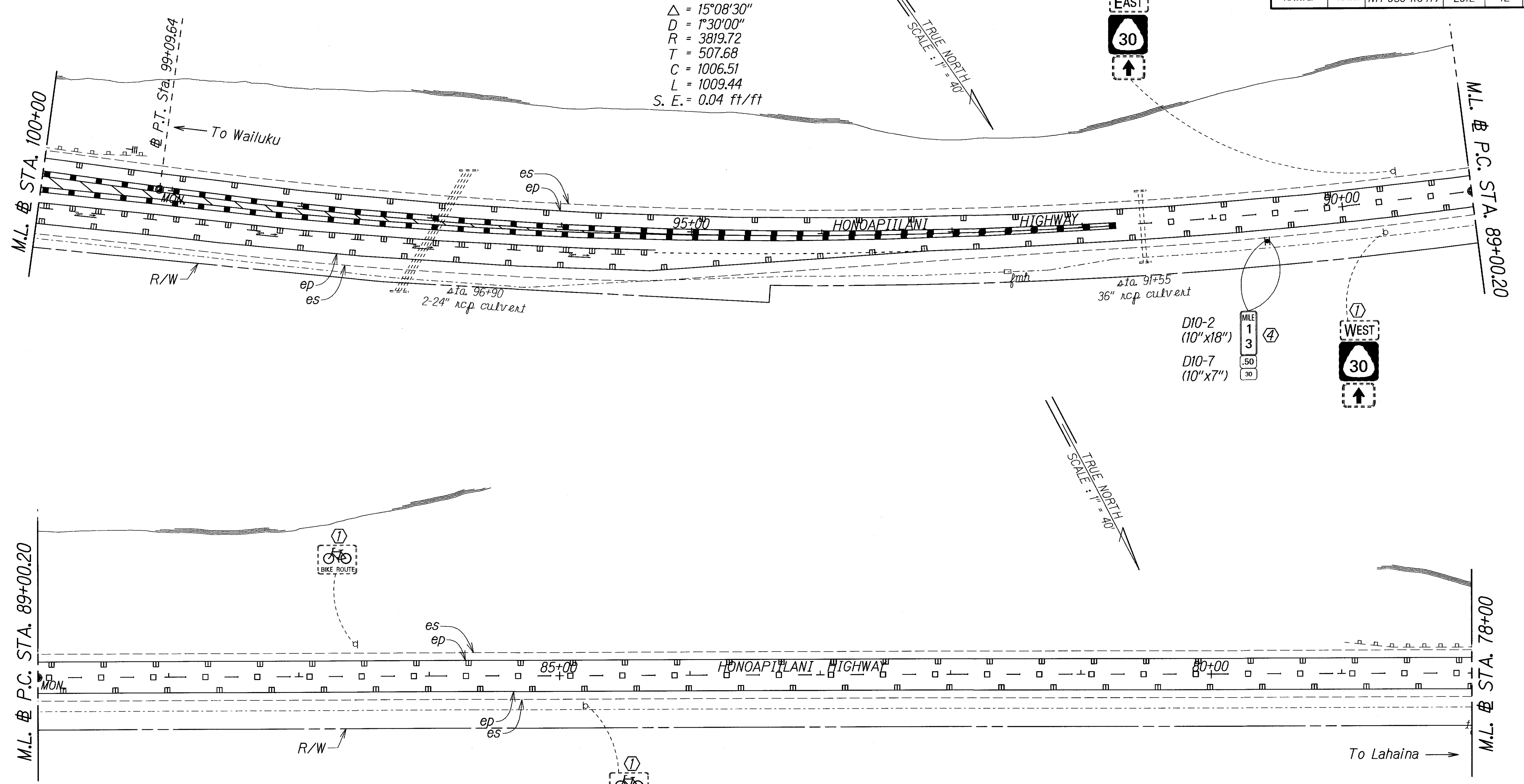
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
**HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE**  
Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1(047)  
Scale: 1" = 40' Date: July, 2011  
SHEET No. 14 OF 18 SHEETS

DATE: 5/21/11  
ORIGINAL PLAN: 5/21/11  
DRAWN BY: JG  
NOTED BY: JG  
DESIGNED BY: JG  
CHECKED BY: JG

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1047)       | 2012        | 42        | 45           |

**☉ CURVE DATA**  
 $\Delta = 15^{\circ}08'30''$   
 $D = 1^{\circ}30'00''$   
 $R = 3819.72$   
 $T = 507.68$   
 $C = 1006.51$   
 $L = 1009.44$   
 $S. E. = 0.04 \text{ ft/ft}$



|                   |       |
|-------------------|-------|
| ORIGINAL PLAN     | DATE  |
| SURVEY PLOTTED BY | _____ |
| DRAWN BY          | _____ |
| TRACED BY         | _____ |
| DESIGNED BY       | _____ |
| CHECKED BY        | _____ |

**LEGEND FOR AS-BUILT POSTINGS**

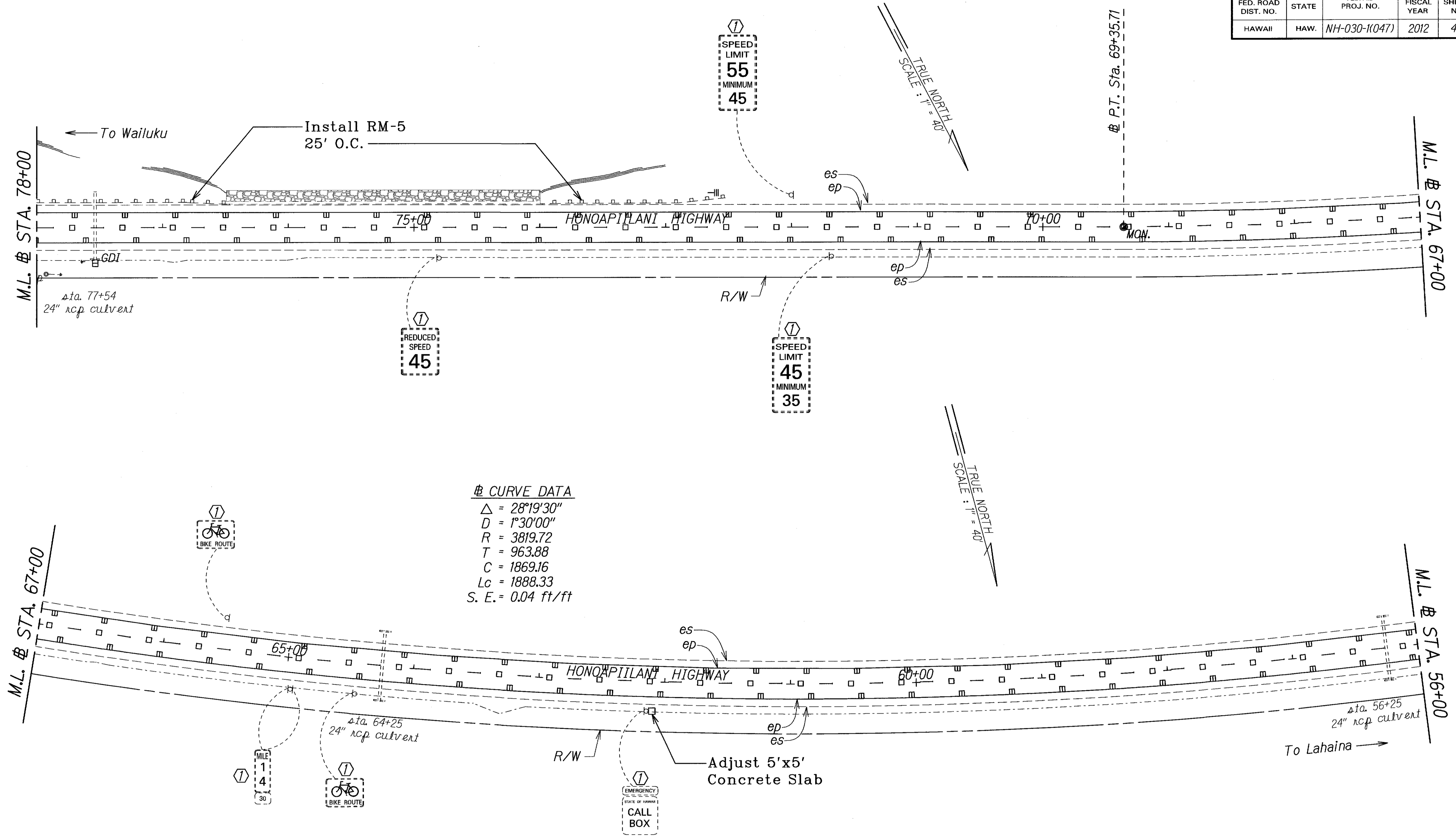
|         |                                     |
|---------|-------------------------------------|
|         | Squiggly line for as-built deletion |
|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

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STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**  
HONOAPIILANI HIGHWAY PAVEMENT PREVENTIVE MAINTENANCE  
Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1047  
Scale: 1" = 40' Date: July, 2011  
SHEET No. 15 OF 18 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 43        | 45           |



**CURVE DATA**  
 $\Delta = 28^{\circ}19'30''$   
 $D = 1^{\circ}30'00''$   
 $R = 3819.72$   
 $T = 963.88$   
 $C = 1869.16$   
 $Lc = 1888.33$   
 $S. E. = 0.04 \text{ ft/ft}$

|                   |      |
|-------------------|------|
| ORIGINAL PLAN     | DATE |
| SURVEY PLOTTED BY | DATE |
| DRAWN BY          | DATE |
| TRACED BY         | DATE |
| NOTES BY          | DATE |
| DESIGNED BY       | DATE |
| CHECKED BY        | DATE |

**LEGEND FOR AS-BUILT POSTINGS**

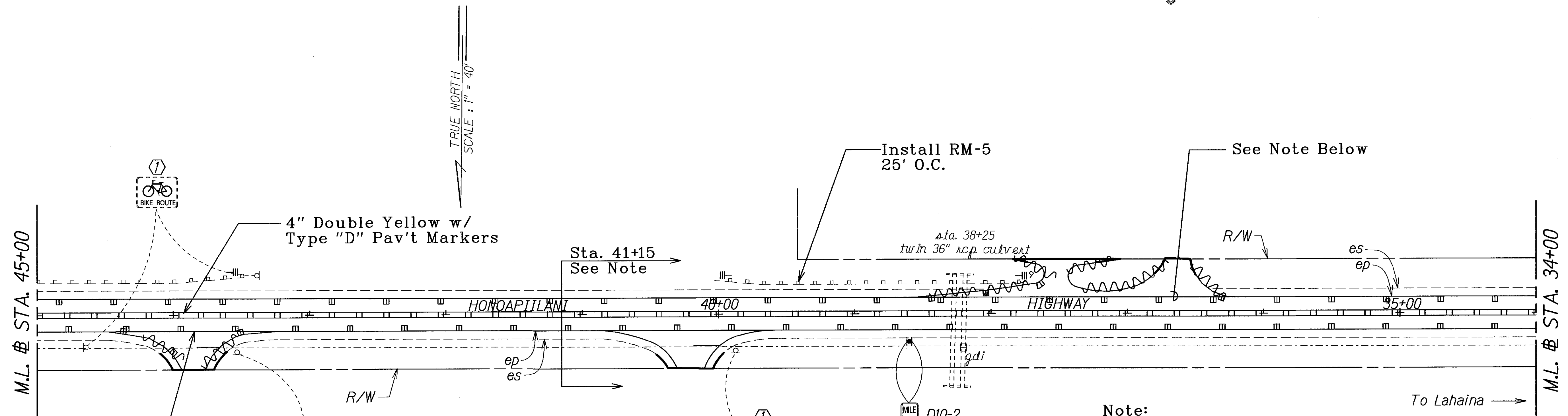
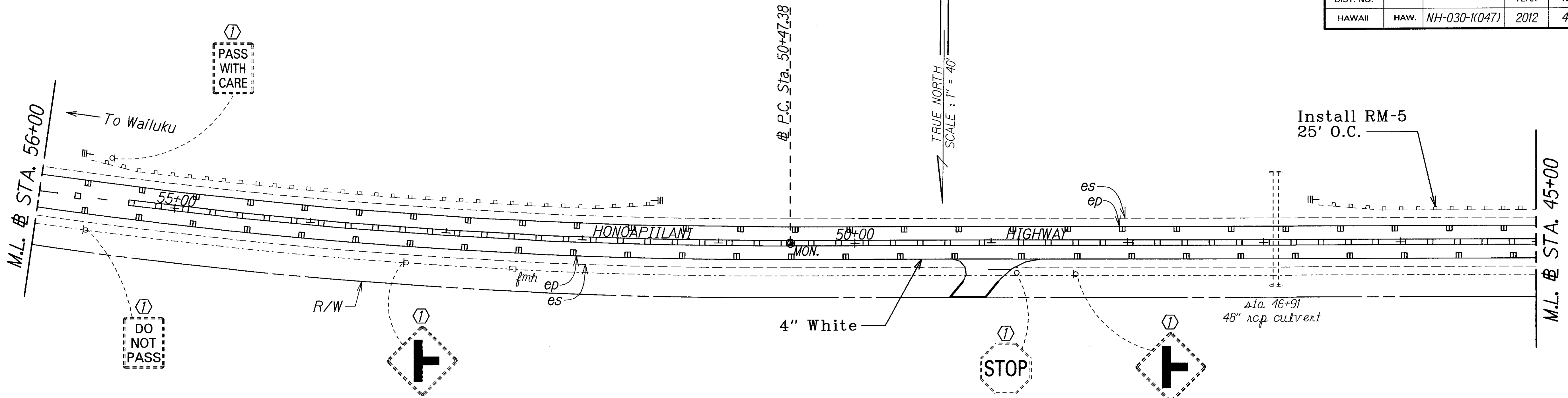
|         |                                     |
|---------|-------------------------------------|
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|         | Double line for as-built deletion   |
| Roadway | Text for as-built posting           |

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STATE OF HAWAII  
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Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1(047)  
Scale: 1" = 40' Date: July, 2011  
SHEET No. 16 OF 18 SHEETS

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 44        | 45           |



4" White w/Type "C" Pav't Markers

STOP

4" Double Yellow w/ Type "D" Pav't Markers

STOP

MILE 1 4  
 .50 D10-2 (10"x18")  
 .30 D10-7 (10"x7")

**Note:**  
 For Sta. 41+15 to Sta. 32+70  
 See Olowalu Hauka Properties  
 Driveway Improvements

|                   |      |
|-------------------|------|
| ORIGINAL PLAN     | DATE |
| SURVEY PLOTTED BY | DATE |
| DRAWN BY          | DATE |
| DESIGNED BY       | DATE |
| CHECKED BY        | DATE |

| LEGEND FOR AS-BUILT POSTINGS |                                     |
|------------------------------|-------------------------------------|
|                              | Squiggly line for as-built deletion |
|                              | Double line for as-built deletion   |
| Roadway                      | Text for as-built posting           |

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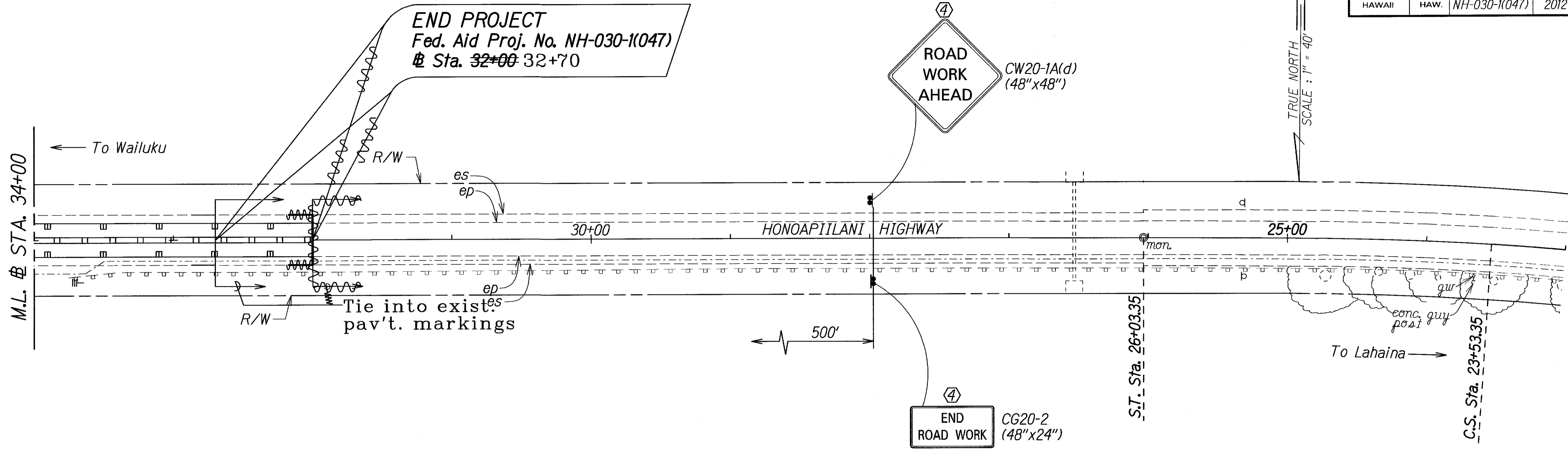
STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

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 PREVENTIVE MAINTENANCE  
 Vicinity of Wind Farm Access Road to Olowalu  
 Federal-Aid Project No. NH-030-1(047)  
 Scale: 1" = 40' Date: July, 2011

SHEET No. 17 OF 18 SHEETS

"AS-BUILT"

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | NH-030-1(047)      | 2012        | 45        | 45           |



|               |                   |      |
|---------------|-------------------|------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| TRACED BY     |                   |      |
| DESIGNED BY   |                   |      |
| CHECKED BY    |                   |      |

| LEGEND FOR AS-BUILT POSTINGS |                                     |
|------------------------------|-------------------------------------|
|                              | Squiggly line for as-built deletion |
|                              | Double line for as-built deletion   |
| Roadway                      | Text for as-built posting           |

- KEY:
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STATE OF HAWAII  
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Vicinity of Wind Farm Access Road to Olowalu  
Federal-Aid Project No. NH-030-1(047)  
Scale: 1" = 40' Date: July, 2011

SHEET No. 18 OF 18 SHEETS