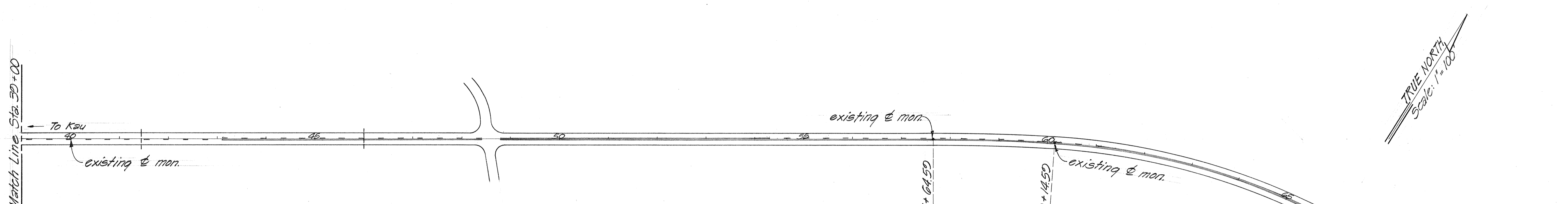
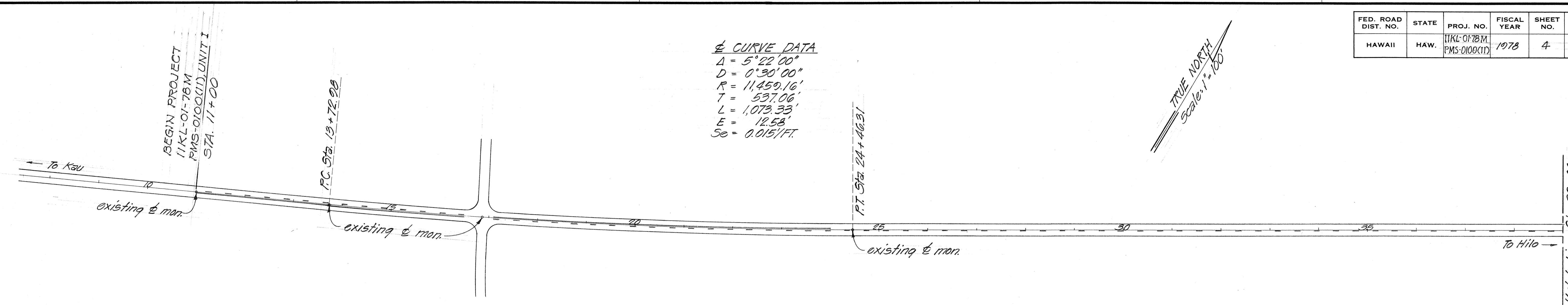


| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------------------|-------------|-----------|--------------|
| HAWAII | HAW. | 11KL-01-78M PMS-0100(1) UNIT I | 1978 | 4 | 10 |

& CURVE DATA
 $\Delta = 5^{\circ}22'00''$
 $D = 0^{\circ}30'00''$
 $R = 11,459.16'$
 $T = 537.06'$
 $L = 1,073.33'$
 $E = 12.58'$
 $S_e = 0.015'/FT.$

TRUE NORTH
 Scale: 1"=100'



PAVEMENT MARKER SCHEDULE

| STATION TO STATION | TYPE D | TYPE H | TYPE J | STATION TO STATION | TYPE D | TYPE H | TYPE J |
|--------------------|--------|--------|--------|--------------------|--------|--------|--------|
| 11+00 - 16+50 | 14 | 14 | 56 | 133+80 - 138+30 | 23 | | |
| 17+10 - 24+00 | 17 | 18 | 72 | 138+70 - 143+60 | 12 | 13 | 52 |
| 24+00 - 43+10 | 48 | | 188 | 143+60 - 148+30 | 12 | | 44 |
| 43+10 - 48+40 | 13 | 14 | 56 | 148+30 - 156+70 | 21 | 21 | 84 |
| 48+80 - 54+30 | 28 | | | 156+70 - 161+00 | 22 | | |
| 54+30 - 61+00 | 17 | 16 | 64 | 161+00 - 166+90 | 15 | 14 | 56 |
| 61+00 - 71+10 | 51 | | | 166+90 - 170+00 | 16 | | |
| 71+10 - 77+10 | 15 | 15 | 60 | 170+00 - 175+90 | 15 | 14 | 56 |
| 77+10 - 109+80 | 82 | | 324 | 175+90 - 184+28.90 | 43 | | |
| 109+80 - 118+60 | 22 | 22 | 88 | 184+28.90 - 104+30 | 7 | | |
| 118+60 - 123+90 | 27 | | | | | | |
| 123+90 - 133+80 | 25 | 24 | 96 | | | | |
| | | | | TOTALS | 545 | 185 | 1,206 |

NOTE: * - Sta. 104+30 from proj. no. F-011-2(1)

& CURVE DATA
 $\Delta = 47^{\circ}22'00''$
 $D = 4^{\circ}00'00''$
 $R = 1,432.40'$
 $L_s = 250.00'$
 $\theta_s = 5^{\circ}00'00''$
 $T_s = 754.05'$
 $E_s = 133.72'$
 $LT = 166.73'$
 $ST = 83.39'$

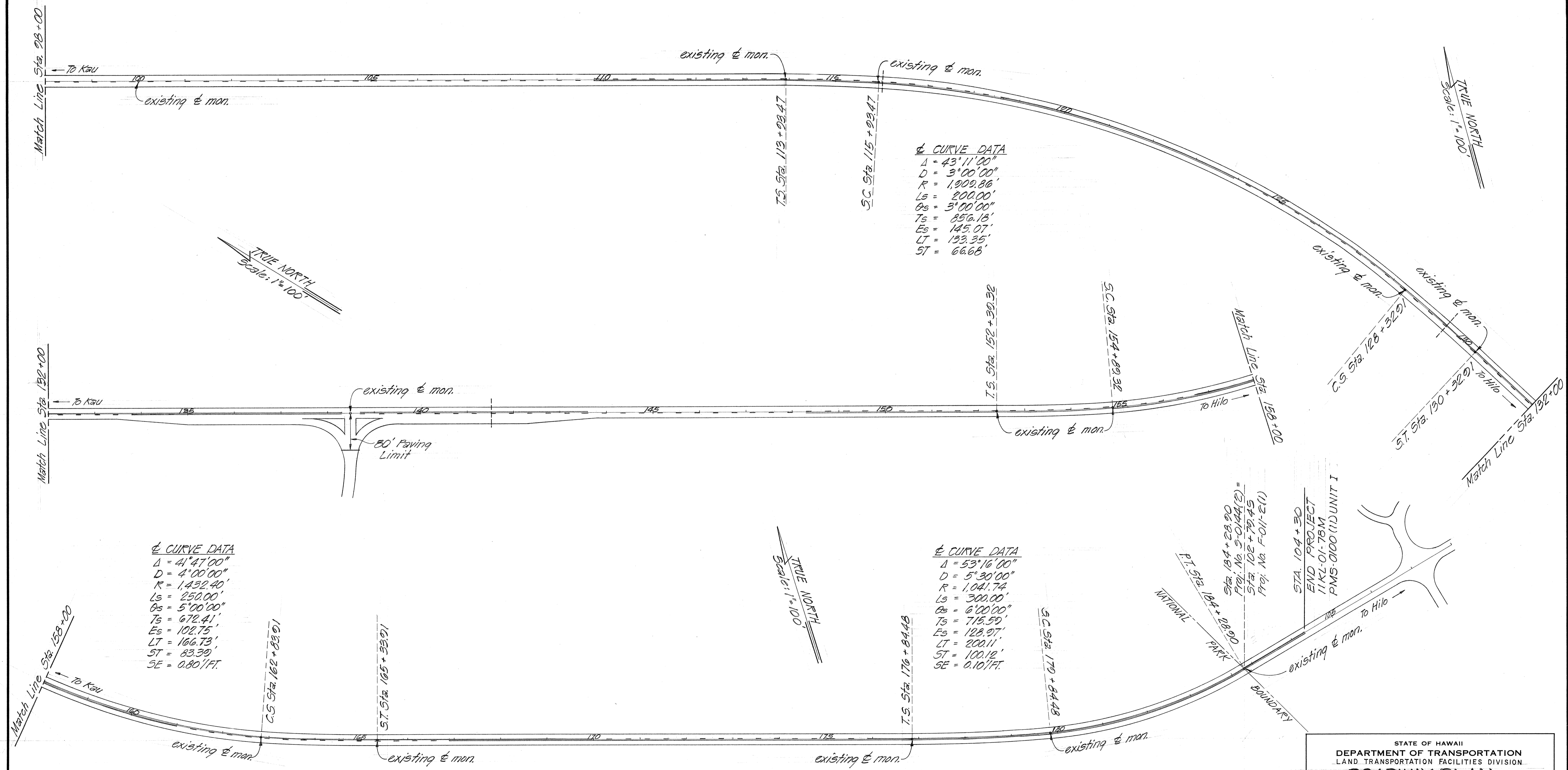
TRUE NORTH
 Scale: 1"=100'

TRUE NORTH
 Scale: 1"=100'

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

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
ROADWAY PLAN
 HAWAII BELT ROAD RESURFACING
 Hawaii National Park By-Pass Road
 Proj. No. 11KL-01-78M
 REFLECTIVE PAVEMENT MARKING
 PROGRAM (PHASE IV)
 F.A. Proj. No. PMS-0100(1) Unit I
 Scale: 1"=100' Date: Apr. 1978
 SHEET No. 1 OF 2 SHEETS

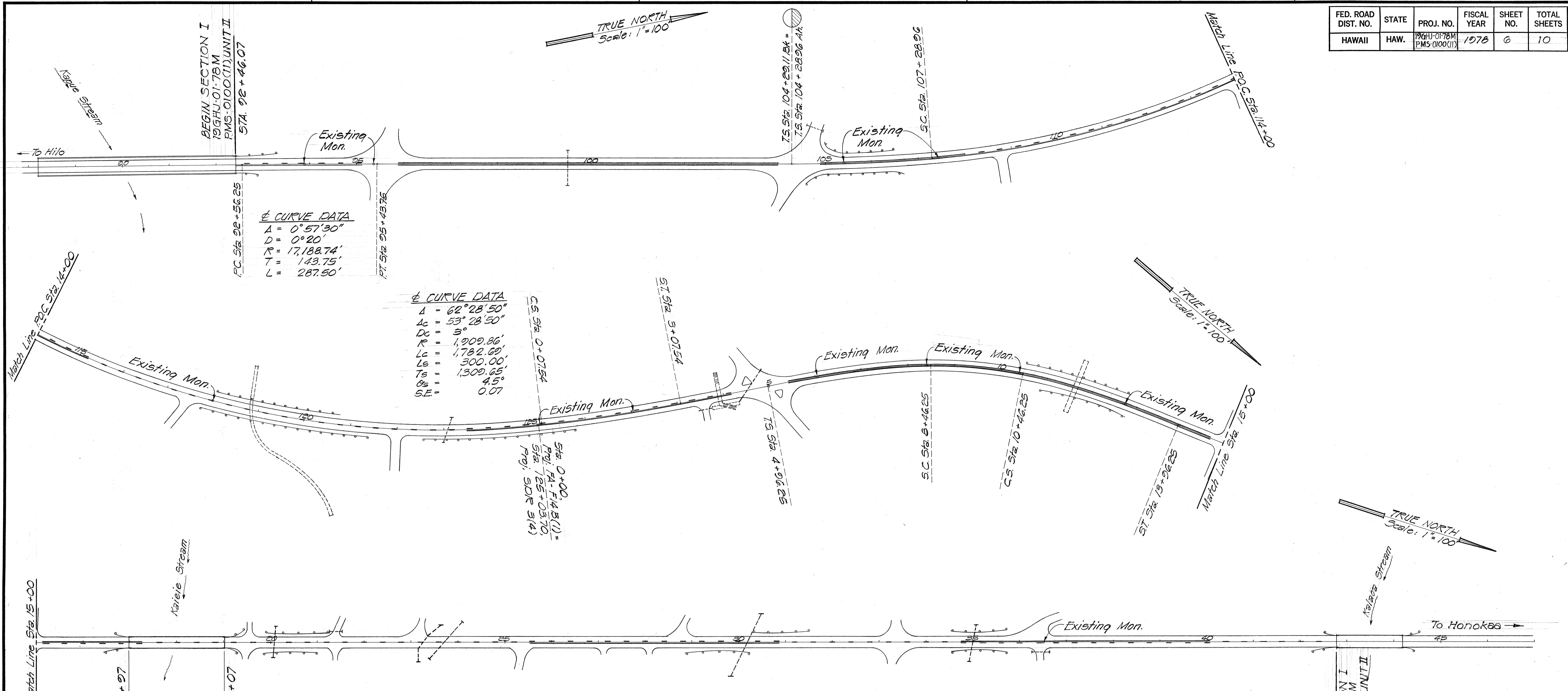
| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|-----------------------------|-------------|-----------|--------------|
| HAWAII | HAW. | 11KL-01-78M PMS-0100(11) | 1978 | 5 | 10 |



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

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
ROADWAY PLAN
 HAWAII BELT ROAD RESURFACING
 Hawaii National Park By-Pass Road
 Proj. No. 11KL-01-78M
 REFLECTIVE PAVEMENT MARKING
 PROGRAM (PHASE IV)
 F.A. Proj. No. PMS-0100(11) Unit I
 Scale: 1"=100' Date: Apr. 1978
 SHEET No. 2 OF 2 SHEETS

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|------------------------------|-------------|-----------|--------------|
| HAWAII | HAW. | 19GHJ-01-78M PMS-0100(11) | 1978 | 6 | 10 |



Curve Data
 A = 0° 57' 30"
 D = 0° 20'
 R = 17,188.74'
 T = 143.75'
 L = 287.50'

Curve Data
 A = 62° 28' 50"
 Δc = 53° 28' 50"
 Dc = 3°
 R = 1,909.86'
 Lc = 1,782.60'
 L = 300.00'
 T = 1,309.65'
 B = 4.5°
 S.E. = 0.07

PAVEMENT MARKER SCHEDULE

| STATION TO STATION | TYPE D | TYPE H | TYPE J |
|--------------------|------------|-----------|------------|
| 22+46.07- 25+10 | 7 | 7 | 28 |
| 25+90- 104+00 | 41 | | |
| 104+90- 108+00 | 16 | | |
| 108+00- 115+20 | 18 | 18 | 72 |
| 115+20- 123+50 | 21 | | 80 |
| 123+50- 4+16 | 14 | 15 | 60 |
| 5+40- 14+70 | 47 | | |
| 15+18- 17+25 | 5 | 6 | 24 |
| 17+25- 25+55 | 21 | | 80 |
| 25+55- 30+85 | 13 | 14 | 56 |
| 30+85- 34+75 | 10 | | 36 |
| 34+75- 40+05 | 13 | 14 | 56 |
| 40+05- 42+74 | 8 | | 28 |
| TOTALS | 234 | 74 | 520 |

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

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 LAND TRANSPORTATION FACILITIES DIVISION
ROADWAY PLAN
 HAWAII BELT ROAD RESURFACING
 SECTION I
 Kapue Bridge to Kalaia Bridge
 Proj. No. 19GHJ-01-78M
 REFLECTIVE PAVEMENT MARKING
 PROGRAM (PHASE IV)
 F.A. Proj. No. PMS-0100(11) Unit II
 Scale: 1" = 100' Date: Apr. 1978
SHEET No. 1 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|---------------------------|-------------|-----------|--------------|
| HAWAII | HAW. | 196HJ-01-78M PMS-0100(11) | 1978 | 7 | 10 |



PAVEMENT MARKER SCHEDULE

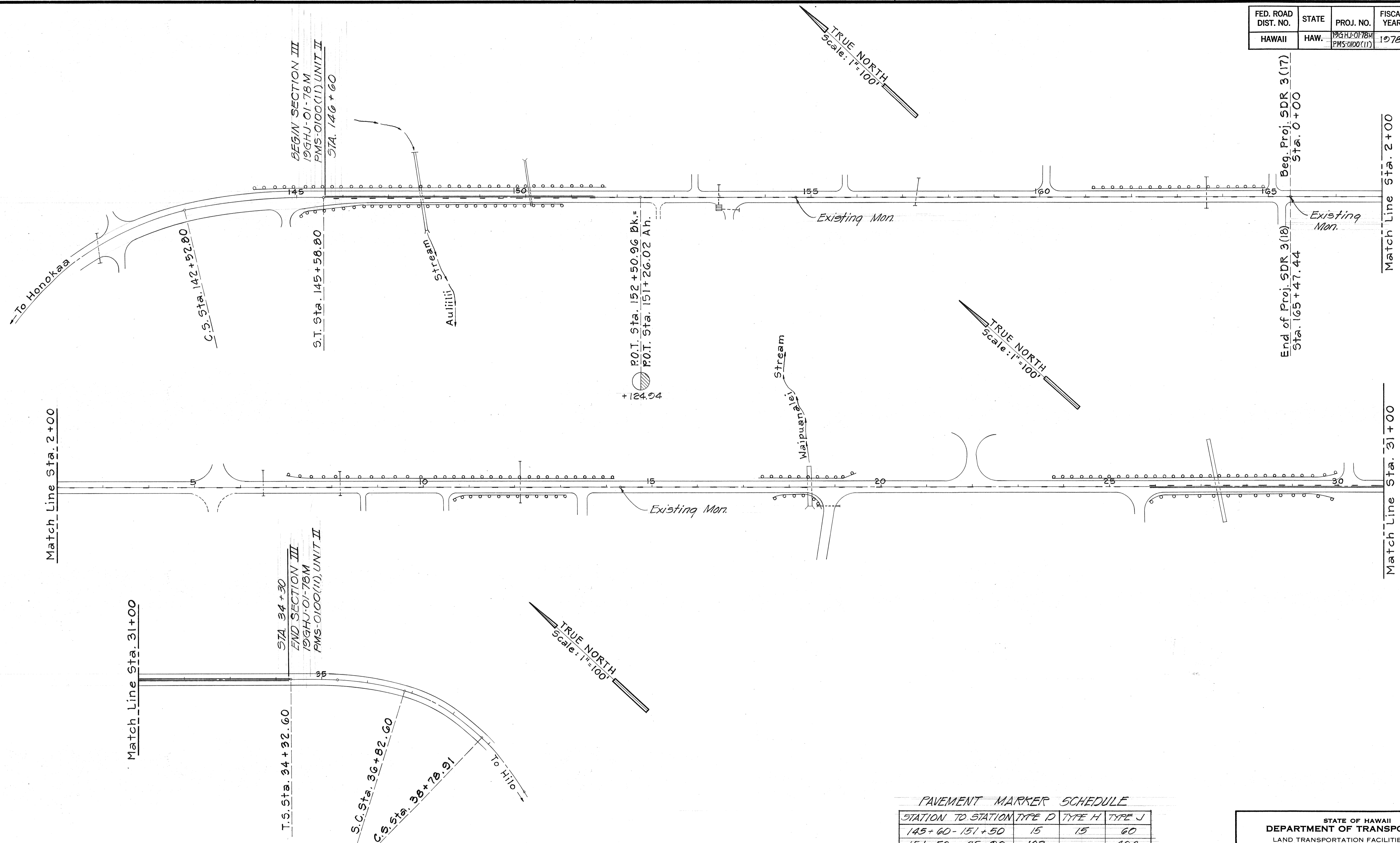
| STATION TO STATION | TYPE D | TYPE H | TYPE J |
|--------------------|--------|--------|--------|
| 0+00- 3+10 | 16 | | |
| 4+30- 6+20 | 10 | | |
| 19+00- 24+05 | 15 | 16 | 64 |
| 24+05- 27+25 | 6 | | 20 |
| 27+25- 40+55 | 33 | 34 | 136 |
| 40+55- 52+05 | 29 | | 112 |
| 52+05- 58+15 | 15 | 16 | 64 |
| 58+15- 60+45 | 6 | | 20 |
| 60+45- 67+35 | 17 | 18 | 72 |
| 67+35- 74+45 | 18 | | 68 |
| 74+45- 79+75 | 13 | 14 | 56 |
| 79+75- 80+05 | 1 | | |
| 80+05- 85+35 | 13 | 14 | 56 |
| 85+35- 96+25 | 28 | | 108 |
| TOTALS | 220 | 112 | 776 |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
ROADWAY PLAN
HAWAII BELT ROAD RESURFACING
SECTION II
Paauilo to Kukaiou
Proj. No. 196HJ-01-78M
REFLECTIVE PAVEMENT MARKING
PROGRAM (PHASE IV)
F.A. Proj. No. PMS-0100(11), Unit II
Scale: 1"=100' Date: Apr. 1978
SHEET NO. 2 OF 4 SHEETS

| | |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| TRACED BY | |
| DESIGNED BY | |
| CHECKED BY | |
| NOTE BOOK | |
| No. | |

| | |
|------------|-----------------|
| STA. 97+50 | Proj. SDR 3(6) |
| STA. 0+00 | Proj. SDR 3(11) |

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|------------------------------|-------------|-----------|--------------|
| HAWAII | HAW. | 198HJ-01-78M PMS-0100(II) | 1978 | 8 | 10 |



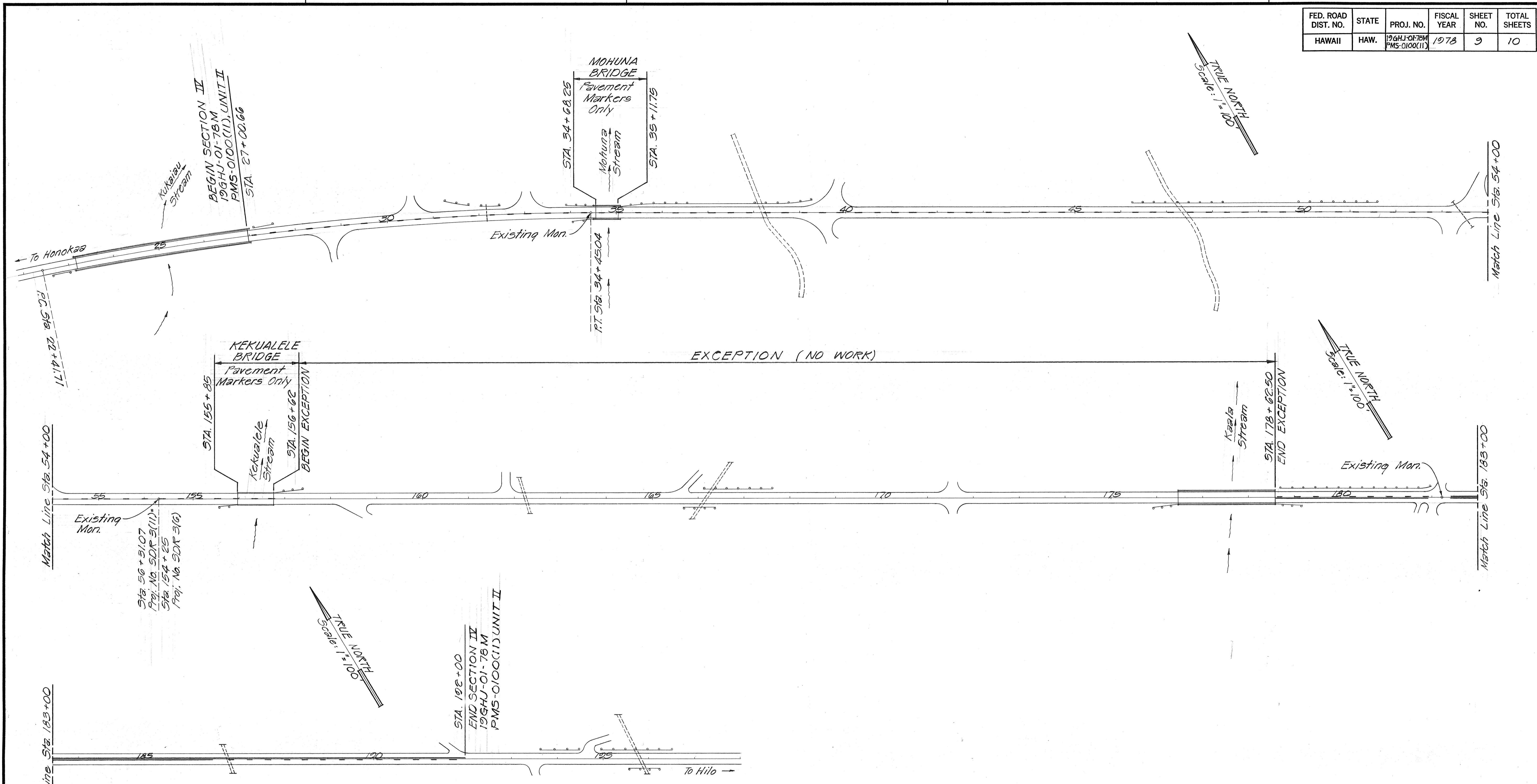
| | | |
|---------------|-------------------|------|
| ORIGINAL PLAN | SURVEY PLOTTED BY | DATE |
| NOTE BOOK | DRAWN BY | |
| No. | DESIGNED BY | |
| | CHECKED BY | |

PAVEMENT MARKER SCHEDULE

| STATION TO STATION | TYPE D | TYPE H | TYPE J |
|--------------------|--------|--------|--------|
| 145+60 - 151+50 | 15 | 15 | 60 |
| 151+50 - 25+90 | 103 | | 408 |
| 25+90 - 30+70 | 12 | 12 | 48 |
| 30+70 - 34+30 | 20 | | |
| TOTALS | 150 | 27 | 516 |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
ROADWAY PLAN
HAWAII BELT ROAD RESURFACING
SECTION III
Kaawalii Gulch to Waipuanalei
Proj. No. 198HJ-01-78M
REFLECTIVE PAVEMENT MARKING
PROGRAM (PHASE IV)
F.A. Proj. No. PMS-0100(II) Unit II
Scale: 1"=100' Date: Apr. 1978
SHEET No. 3 OF 4 SHEETS

| FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|------------------------------|-------------|-----------|--------------|
| HAWAII | HAW. | 196HJ-01-78M PMS-0100(11) | 1978 | 9 | 10 |



PAVEMENT MARKER SCHEDULE

| STATION TO STATION | TYPE D | TYPE H | TYPE J |
|--------------------|------------|-----------|------------|
| 27+00.66-56+31.07 | 73 | | 292 |
| 154+25-156+62 | 7 | | 28 |
| 178+62.5-181+90 | 9 | 9 | 36 |
| 182+40-186+50 | 21 | | |
| 186+50-192+00 | 14 | 13 | 52 |
| TOTALS | 124 | 22 | 408 |

| | |
|-------------------|------|
| SURVEY PLOTTED BY | DATE |
| DRAWN BY | |
| DESIGNED BY | |
| CHECKED BY | |
| NOTE BOOK | |
| No. | |

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
ROADWAY PLAN
HAWAII BELT ROAD RESURFACING
SECTION IV
Kukaiau Bridge to Kealakaha Bridge
Proj. No. 196HJ-01-78M
REFLECTIVE PAVEMENT MARKING
PROGRAM (PHASE IV)
F.A. Proj. No. PMS-0100(11) Unit II
Scale: 1"=100' Date: Apr. 1978
SHEET No. 4 OF 4 SHEETS