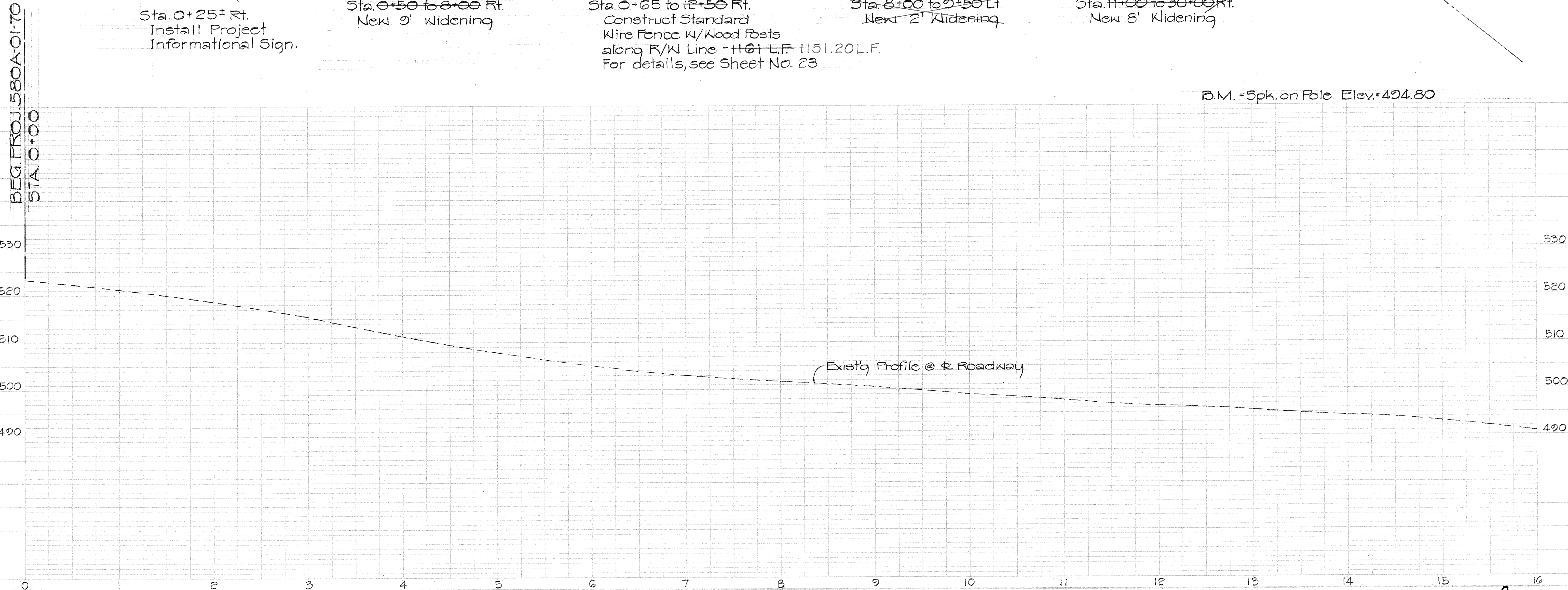
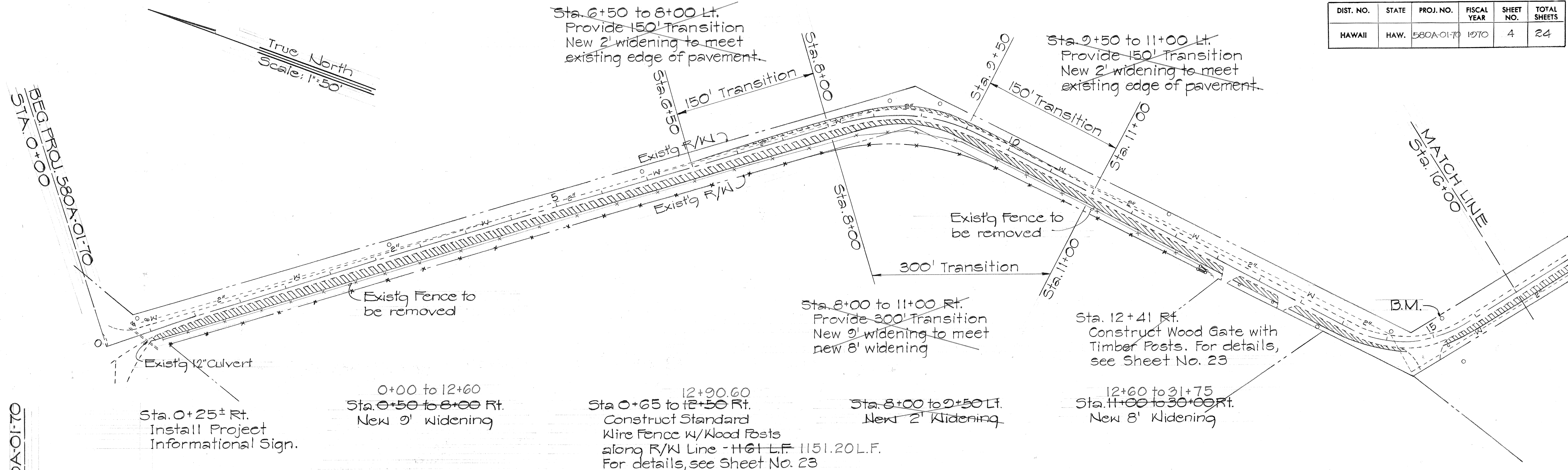


DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-70	1970	4	24

PLAN	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
NOTE BOOK				
NO.				

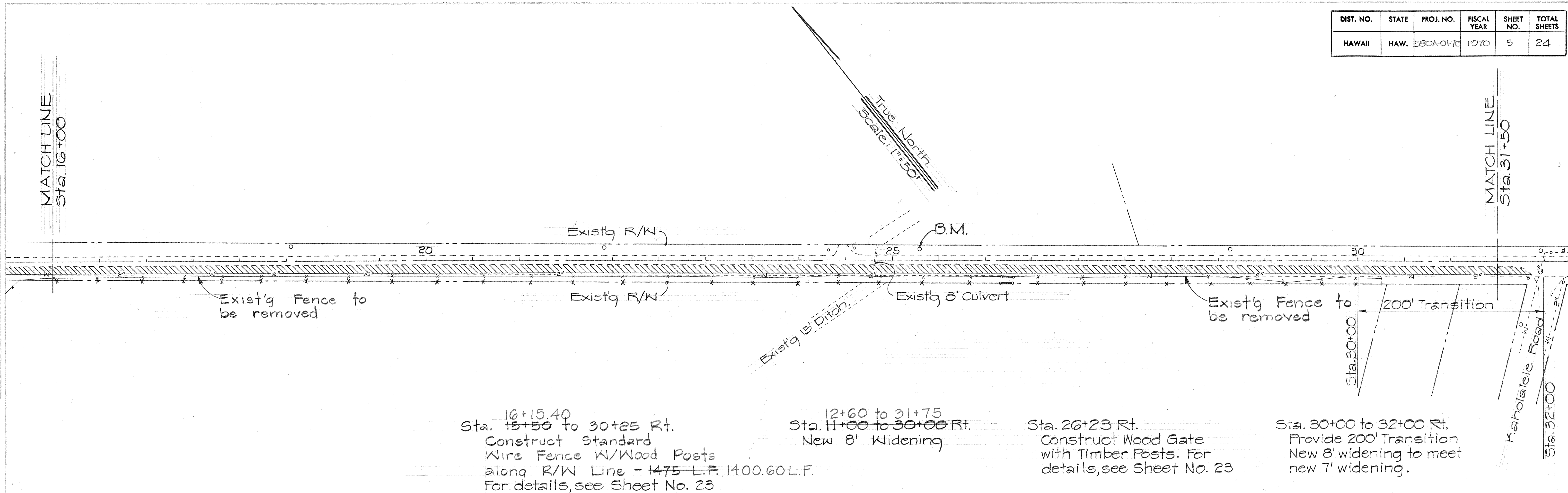
PROFILE	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
NOTE BOOK				
NO.				



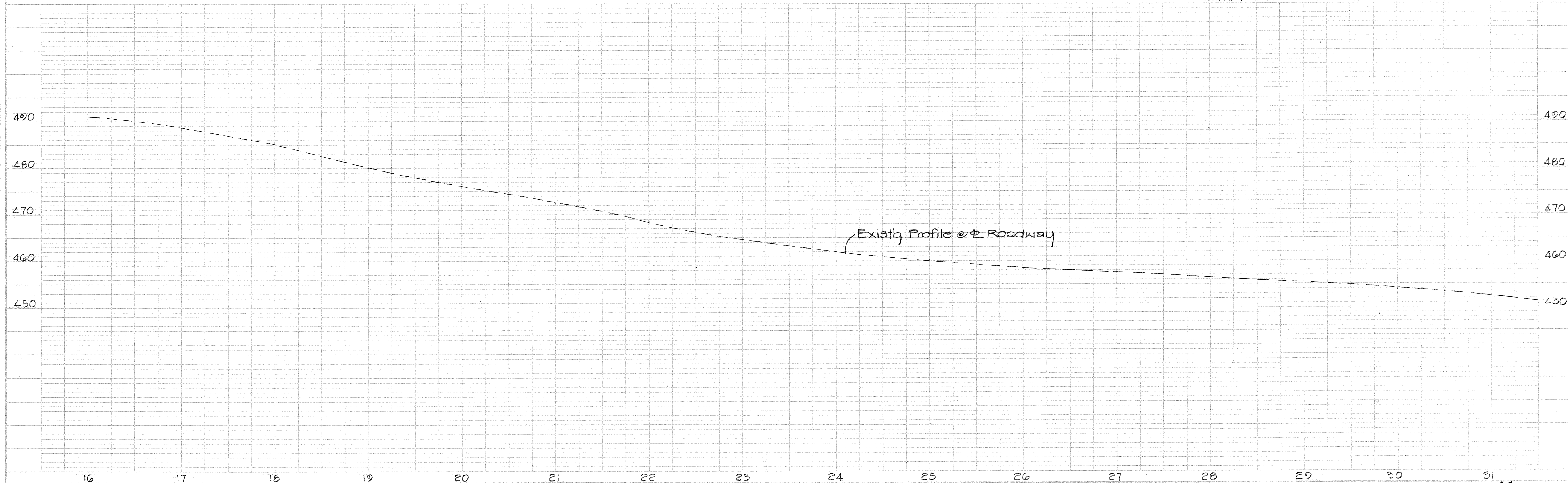
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-70	1970	5	24

PLAN	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK	ALIGNED CHECKED	
	RT. OF WAY CHECKED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



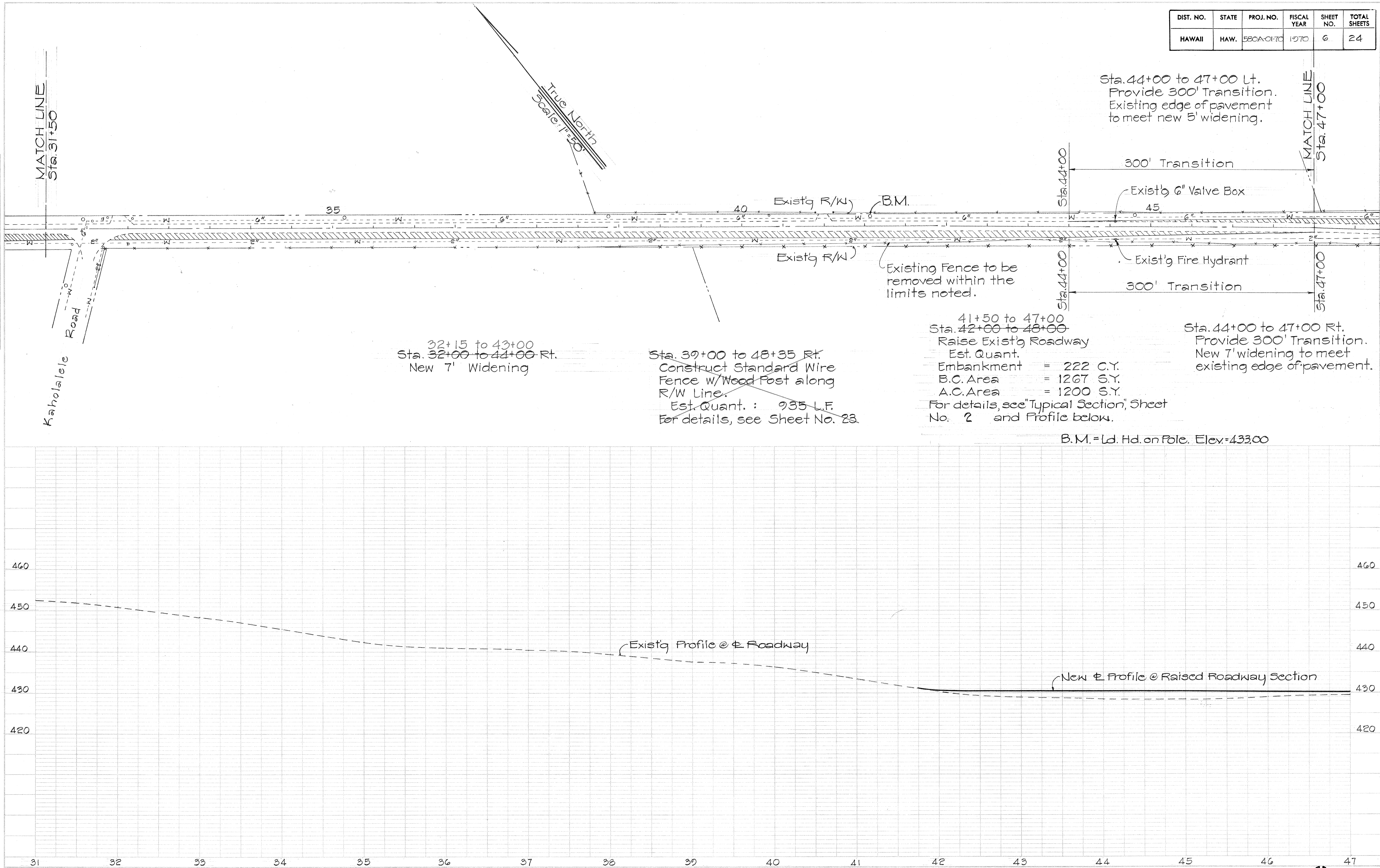
B.M. = Ld. Hd. on Pole. Elev. = 461.33



DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-0170	1970	6	24

PLAN	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK		
RT. OF WAY CHECKED		

PROFILE	DATE	BY
SURVEYED		
PLOTTED		
NOTE BOOK		
RT. OF WAY CHECKED		



PLAN	DATE	BY
SURVEYED		
NOTED		
NO.		

PROFILE	DATE	BY
SURVEYED		
NOTED		
NO.		

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-70	1970	7	24

Install Metal Guard Rails w/Steel Posts. Use applicable approach and trailing end details. For details, see Sheet Nos. 16 to 20

Est. Quant. : 49+65 to 50+65 Lt. 125.9 L.F.
Sta. 48+00 to 49+65 Lt. 175 L.F.
Sta. 54+20 to 54+70 Lt. 50.6 L.F.
Sta. 58+00 to 60+40 Lt. 237.5 L.F.

Sta. 54+50 to 55+75 Lt. 54+72 to 56+00
Provide 125' Transition. New 5' widening to meet existing edge of pavement.

MATCH LINE
Sta. 47+00

Exist'g Delineators RM-1

Mail Box

48+47 to 50+93.75
Sta. 48+30 to 51+52 Lt.
Construct Standard Wire Fence w/Wood Posts.
Est. Quant. : 306 L.F. 246.75
For details, see Sheet No. 23

47+50 to 54+72
Sta. 47+00 to 54+50 Lt.
New 5' Widening

Existing fenceline to be removed within the limits noted.

Exist'g 6" Valve Box

B.M.

Exist'g Fire Hydrant

Exist'g 6" Valve Box

Exist'g R/W

Exist'g R/W

Exist'g 24" Culvert

Sta. 54+75 to 56+00 Rt.
Provide 125' Transition.
Existing edge of pavement to meet new 5' widening.

56+50 70+73
Sta. 56+00 to 70+50 Rt.
New 5' Widening

MATCH LINE
Sta. 63+00

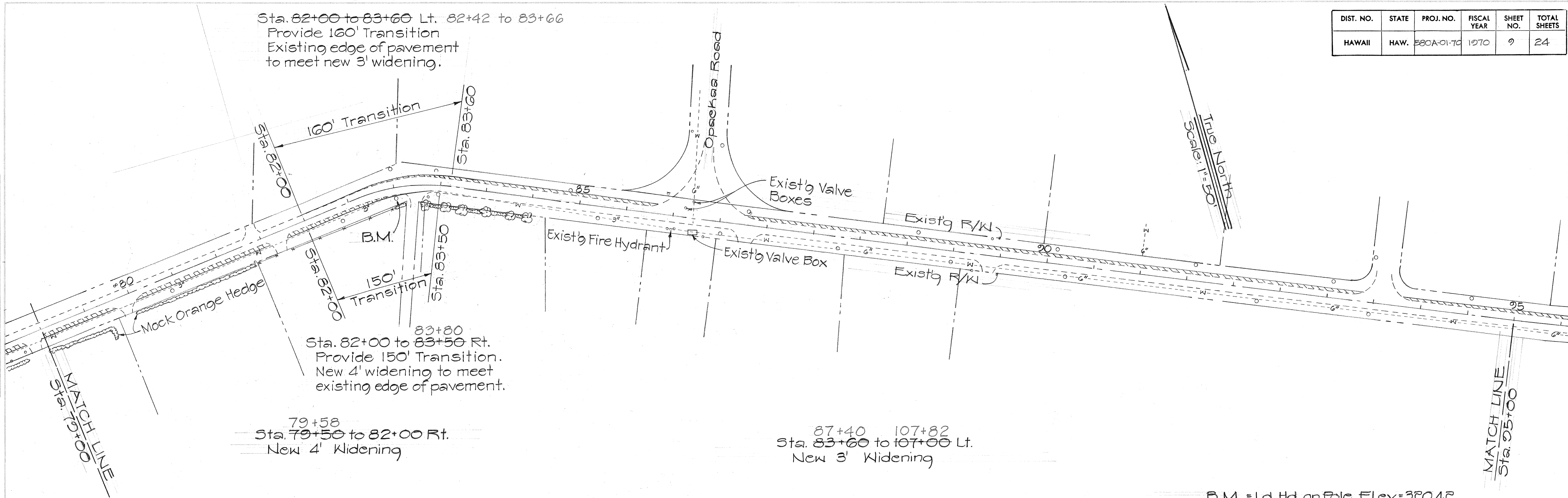
B.M. = Ld. Hd. on Pole Elev. = 431.27

Exist'g Profile @ Roadway

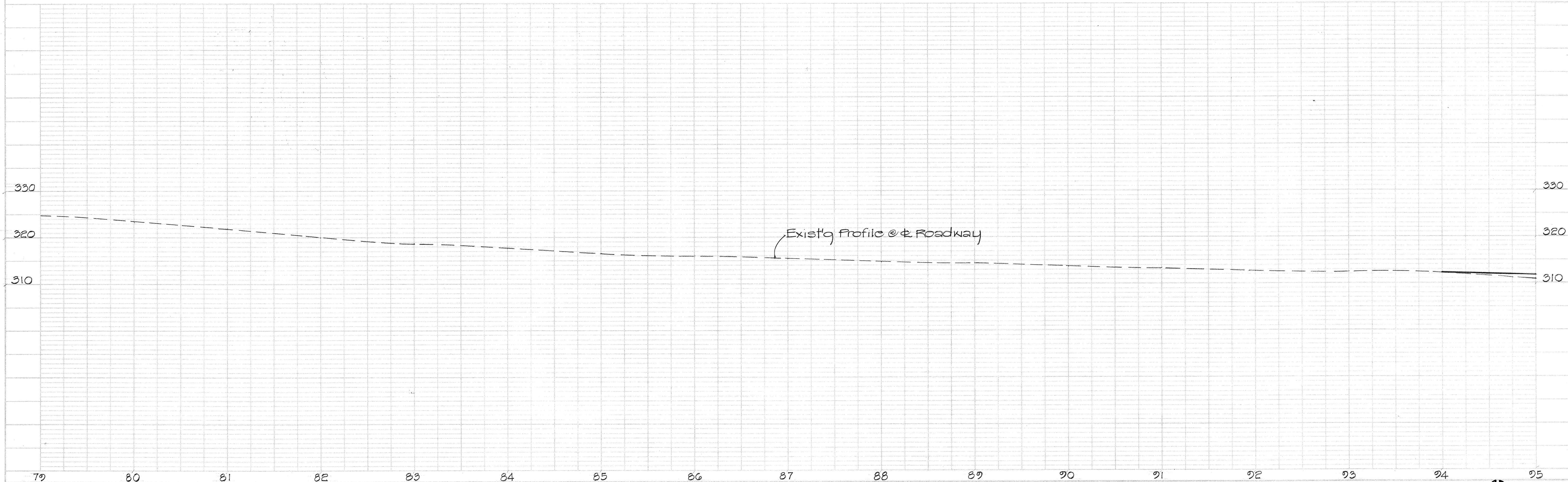
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-70	1970	9	24

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED CHECKED	
	NO. OF WY. CIRCLES	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED CHECKED	
	STRUCTURE NOTATIONS CHYNO	



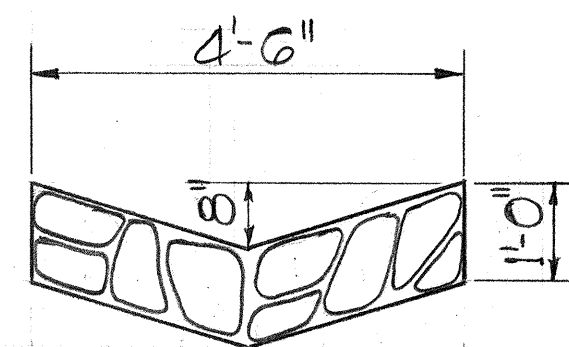
B.M. = Ld. Hd. on Pole. Elev=320.42



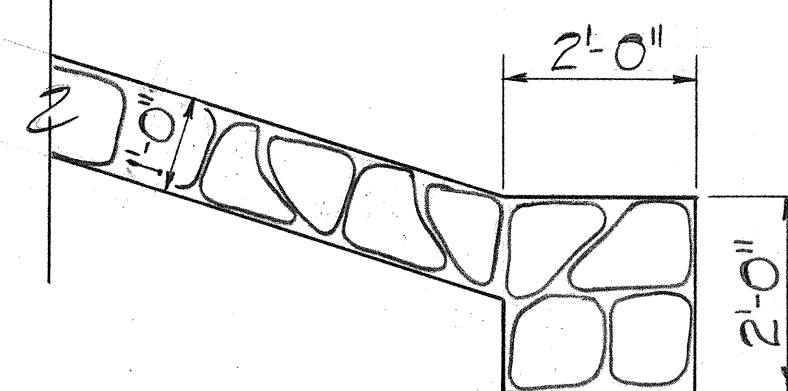
PLAN	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
NOTE BOOK				
NO.				

PROFILE	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
NOTE BOOK				
NO.				

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-70	1970	10	24



SECTION
GRP SPILLWAY AT OUTLET END
Sta. 12+75 (Kamalu Road)
Scale: 1/2" = 1'-0"



SIDE VIEW

True North
Scale: 1" = 50'

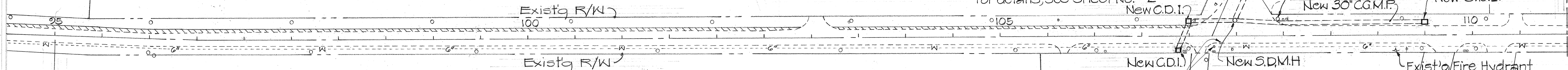
2+78.40
Sta. 3+00 Rt. (Kamalu Rd)
Construct C.D.I.
Est. Quant.
Struct. Exc. = 9.5 C.Y.
Class "B" Conc. = 3.5 C.Y.
Frame and Grate 1 Ea.
For details, see Sheet No. 2

Sta. 12+75 (Kamalu Rd.)
Construct G.R.P. Spillway
Est. Quant.
G.R.P. = 3.0 C.Y.

5+83.50
Sta. 6+00 Rt. (Kamalu Rd)
Construct C.D.I.
Est. Quant.
Struct. Exc. = 11.5 C.Y.
Class "B" Conc. = 4.5 C.Y.
Frame and Grate 1 Ea.
For details, see Sheet No. 2

Sta. 9+00 Rt. (Kamalu Rd)
Conc. C.D.I. 8+89
Est. Quant.
Struct. Exc. = 7.5 C.Y.
Class "B" Conc. = 3.0 C.Y.
Frame and Grate 1 Ea.
For details, see Sheet No. 2

Sta. 0+15 to 12+75 (Kamalu Rd)
Install 30" 14 Ga. C.G.M.P.
Est. Quant.
Struct. Exc. = 16.75 C.Y.
30" C.G.M.P. = 1,260 L.F.



MATCH LINE
Sta. 95+00

94+15 100+50
Sta. 94+00 to 99+00
Raise Existing Roadway
Est. Quant.
Embankment = 56 C.Y.
B.C. Area = 1056 S.Y.
A.C. Area = 1000 S.Y.
For details, see "Typical Section"
Sheet No. 2 and Profile below

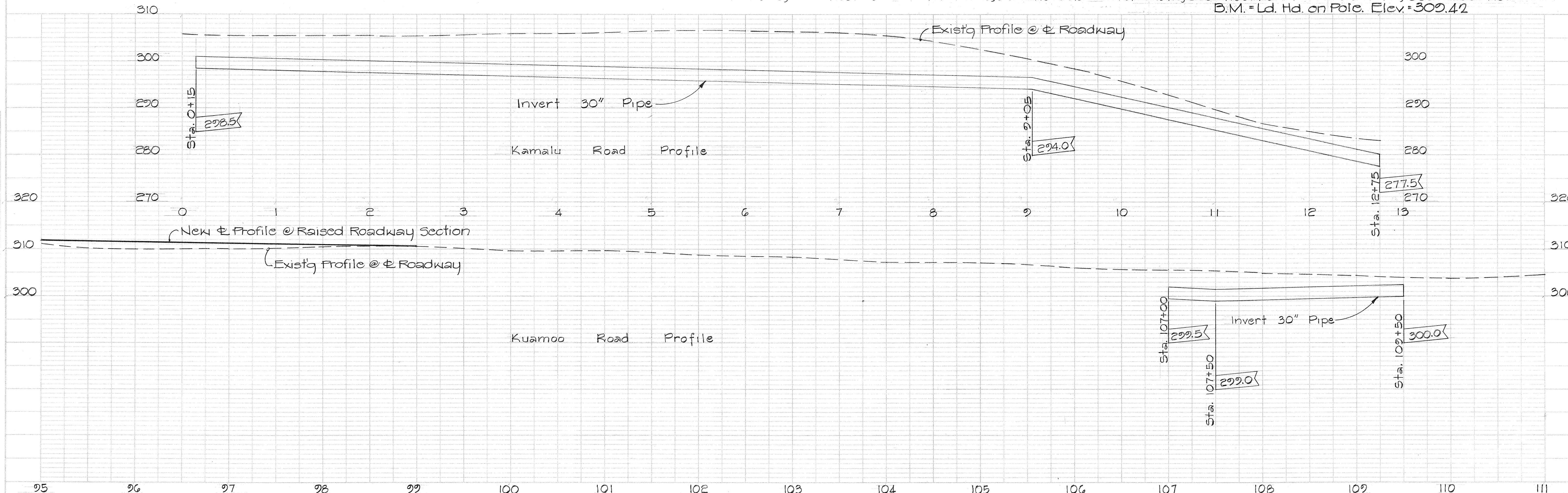
87+40 107+82
Sta. 83+60 to 107+00 Lt.
New 3' Widening

Sta. 106+20 Rt.
Construct C.D.I.
Est. Quant.
Struct. Exc. = 6.5 C.Y.
Class "B" Conc. = 3.0 C.Y.
Frame and Grate 1 Ea.
For details, see Sheet No. 2

Sta. 107+00 Lt.
Construct C.D.I.
Est. Quant.
Struct. Exc. = 6.5 C.Y.
Class "B" Conc. = 3.0 C.Y.
Frame and Grate 1 Ea.
For details, see Sheet No. 2

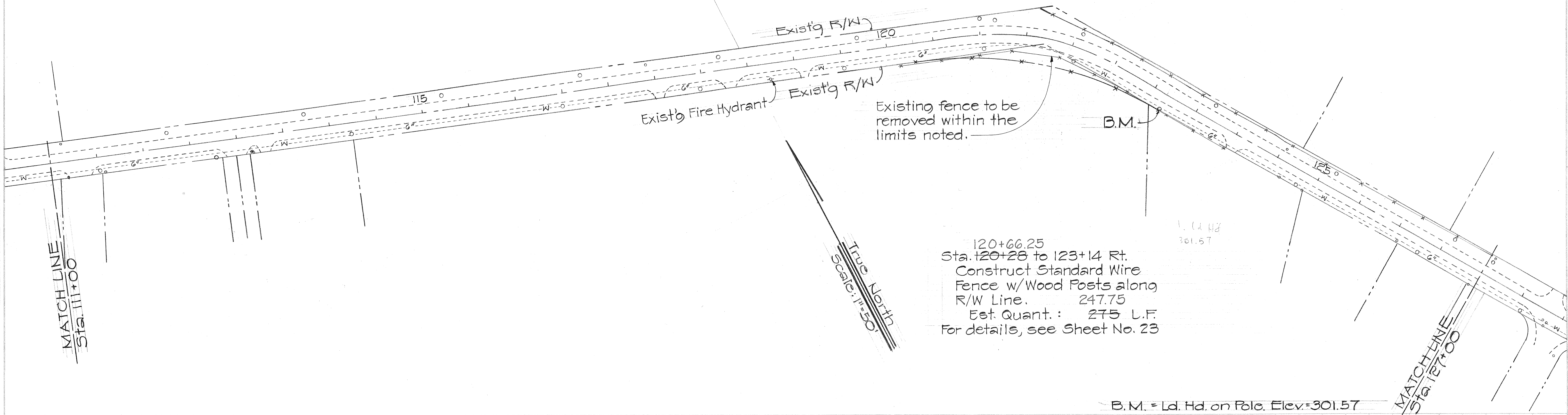
Sta. 107+50 Lt.
Construct S.D.M.H.
Est. Quant.
Struct. Exc. = 6.5 C.Y.
Class "B" Conc. = 3.0 C.Y.
Reinf. Steel = 175 lbs.
M.H. Frame and Cover 1 Ea.
For details, see Sheet No. 21

Sta. 109+50 Lt.
Construct C.D.I.
Est. Quant.
Struct. Exc. = 5.0 C.Y.
Class "B" Conc. = 2.0 C.Y.
Frame and Grate 1 Ea.
For details, see Sheet No. 2
B.M. = Ld. Hd. on Pole. Elev. = 309.42

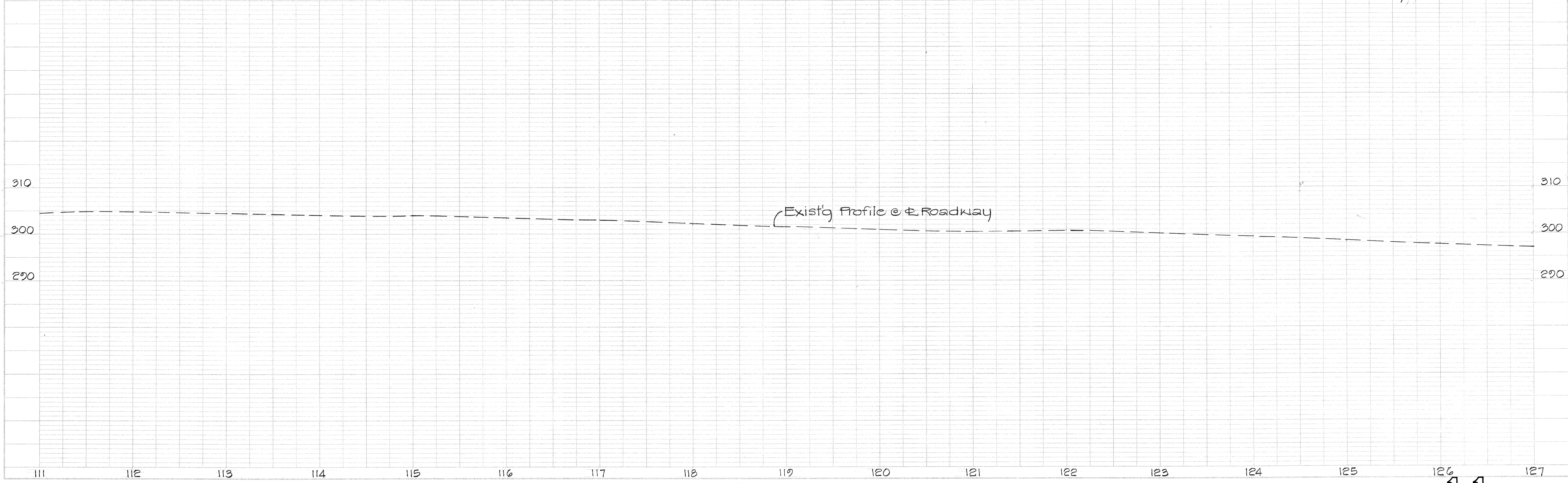


DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-0170	1970	11	24

PLAN	DATE	
	BY	
	SURVEYED	
	NOTED	



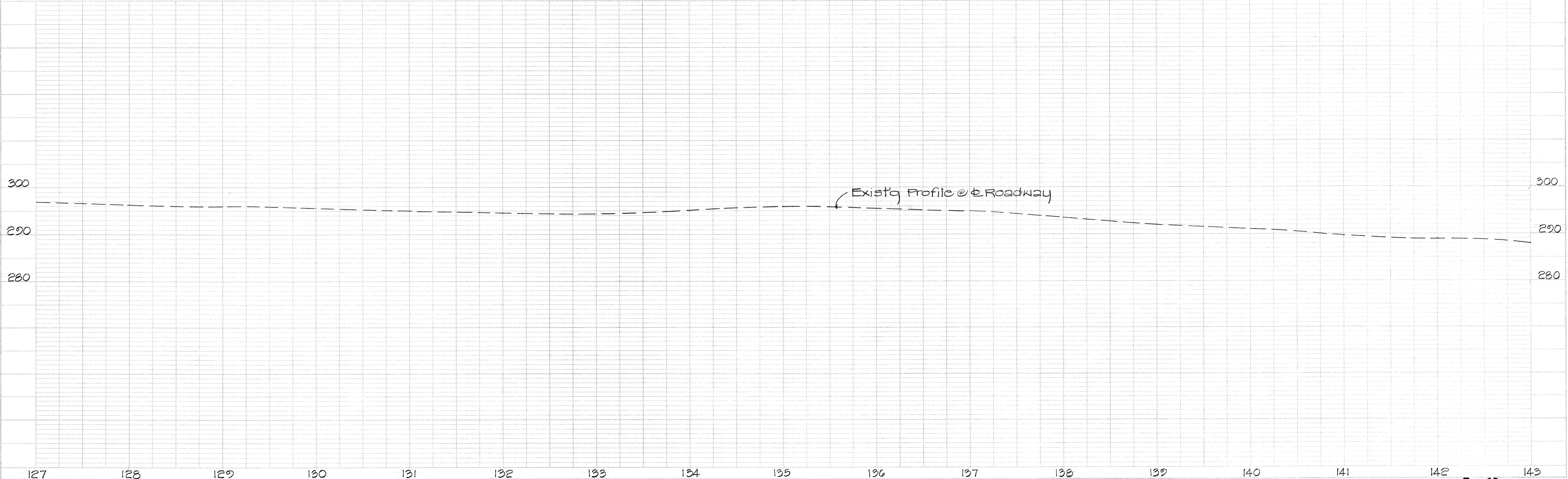
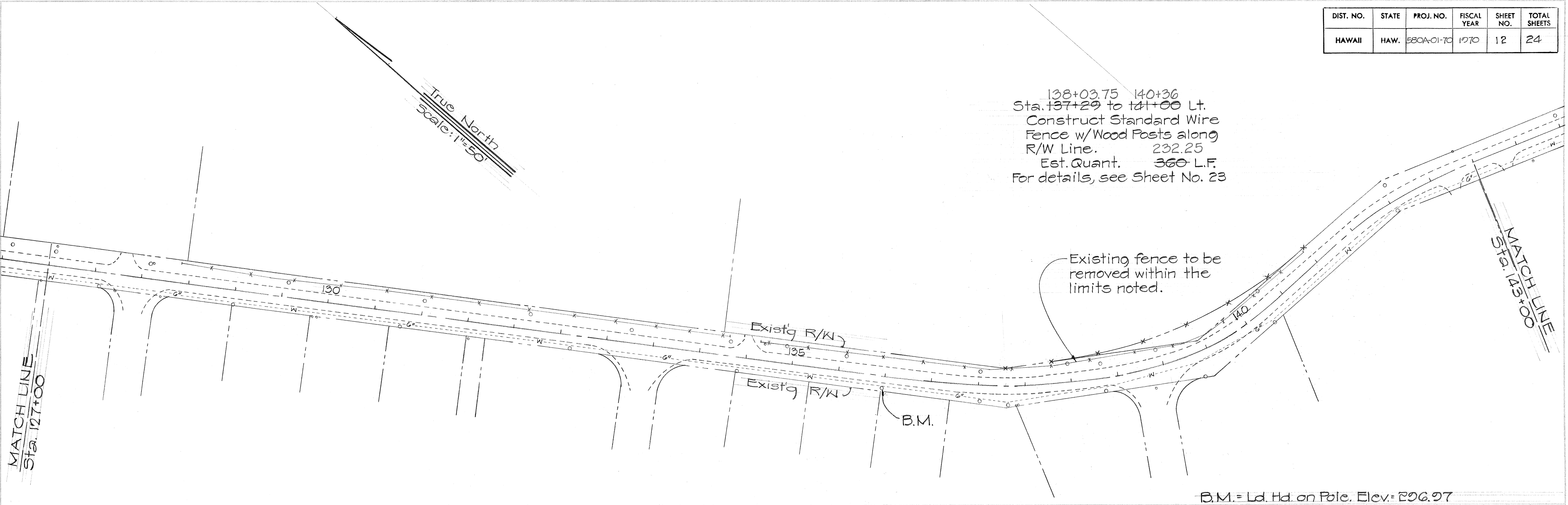
PROFILE	DATE	
	BY	
	SURVEYED	
	NOTED	



DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-70	1970	12	24

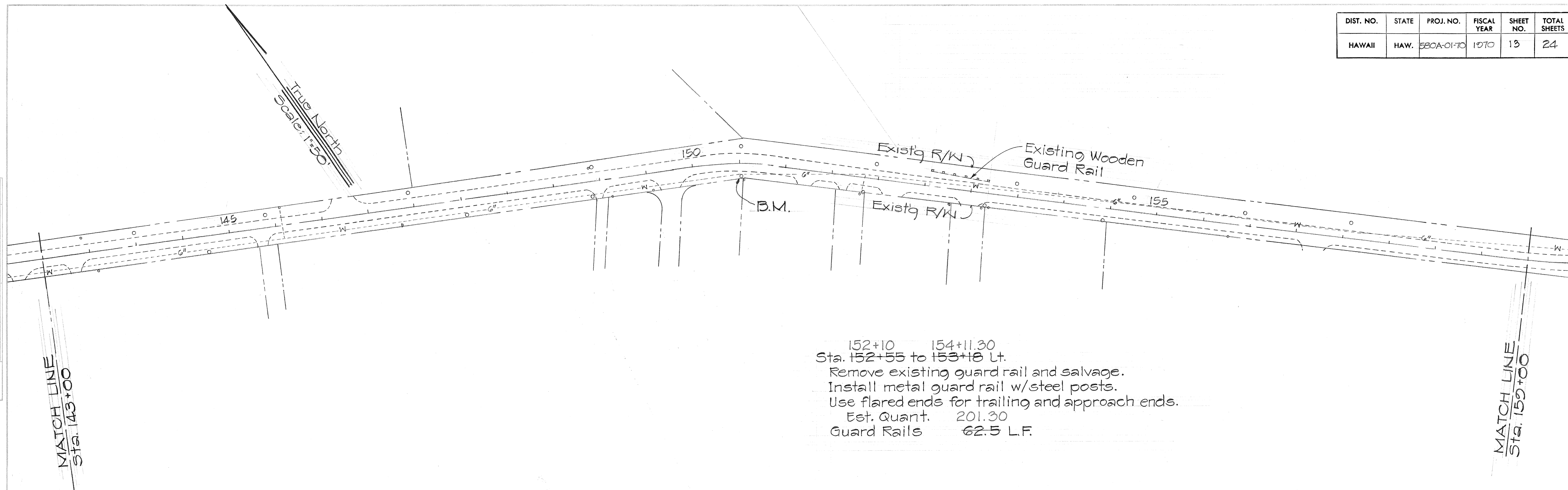
PLAN	SURVEYED	DATE
	NOTED	BY
	NOTED	BY
	NOTED	BY

PROFILE	SURVEYED	DATE
	NOTED	BY
	NOTED	BY
	NOTED	BY



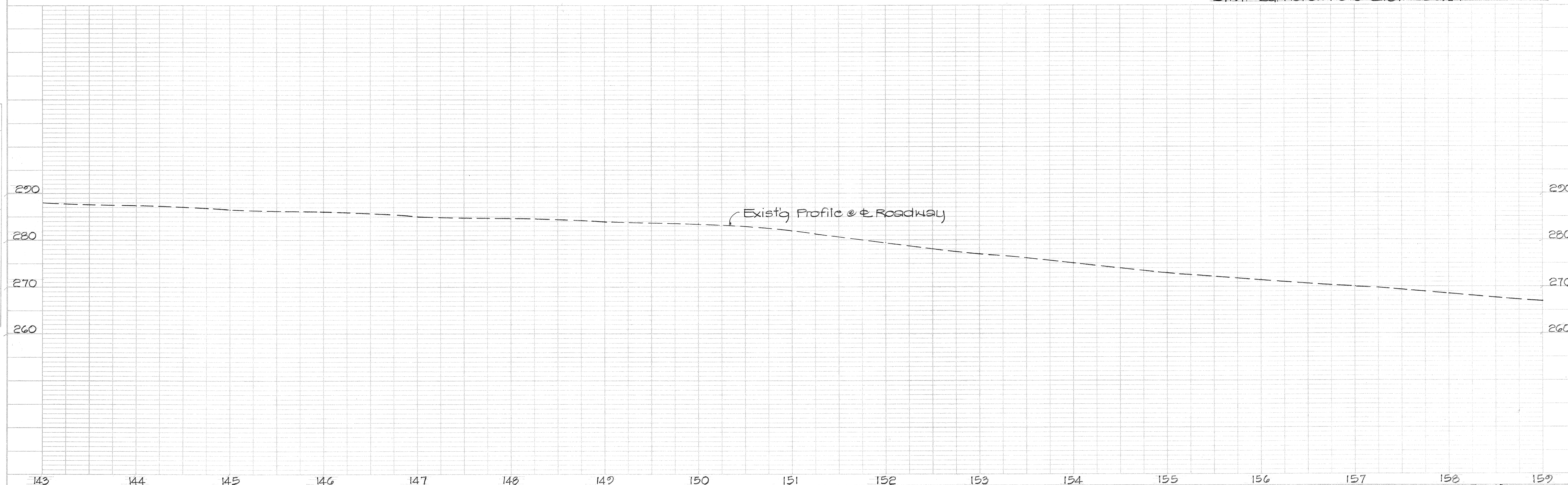
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-70	1970	13	24

PLAN	SURVEYED	DATE
	NOTED	BY
	ALIGNED	
	CHECKED	
NOTE BOOK		
RT. OF WAY CHECKED		
NO.		



B.M. = Ld. Hd. on Pole. Elev = 283.24

PROFILE	SURVEYED	DATE
	NOTED	BY
	GRADES CHECKED	
	CHECKED	
NOTE BOOK		
S.M.3 NOTED		
S.M.3 NOTED		
NO.		



DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-0170	1970	14	24

PLAN	SURVEYED	DATE
NO.	BY	
NOTE BOOK	PLOTTED	
NO.	BY	
NOTE BOOK	CHECKED	
NO.	BY	
NOTE BOOK	BY	

PROFILE	SURVEYED	DATE
NO.	BY	
NOTE BOOK	PLOTTED	
NO.	BY	
NOTE BOOK	CHECKED	
NO.	BY	
NOTE BOOK	BY	

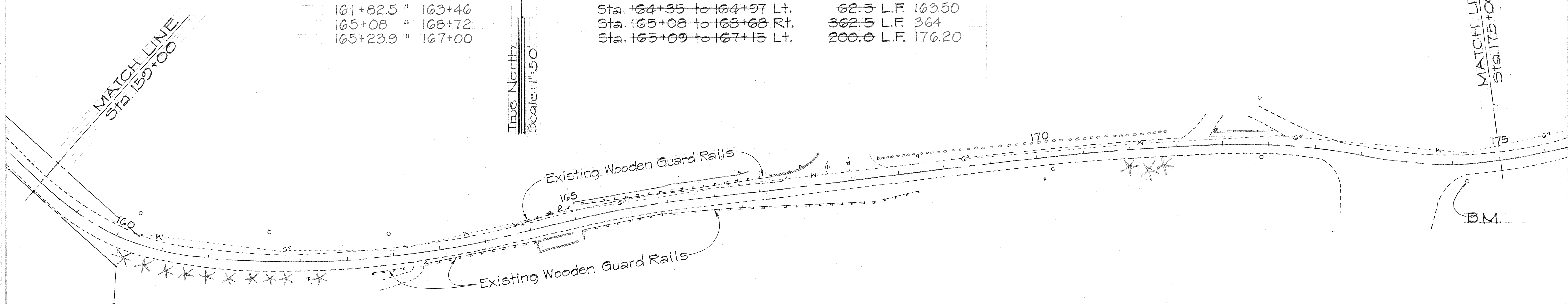
Remove existing guard rails and salvage.
Install metal guard rail w/steel posts.
Use flared ends for trailing and approach ends.

Est. Quant.

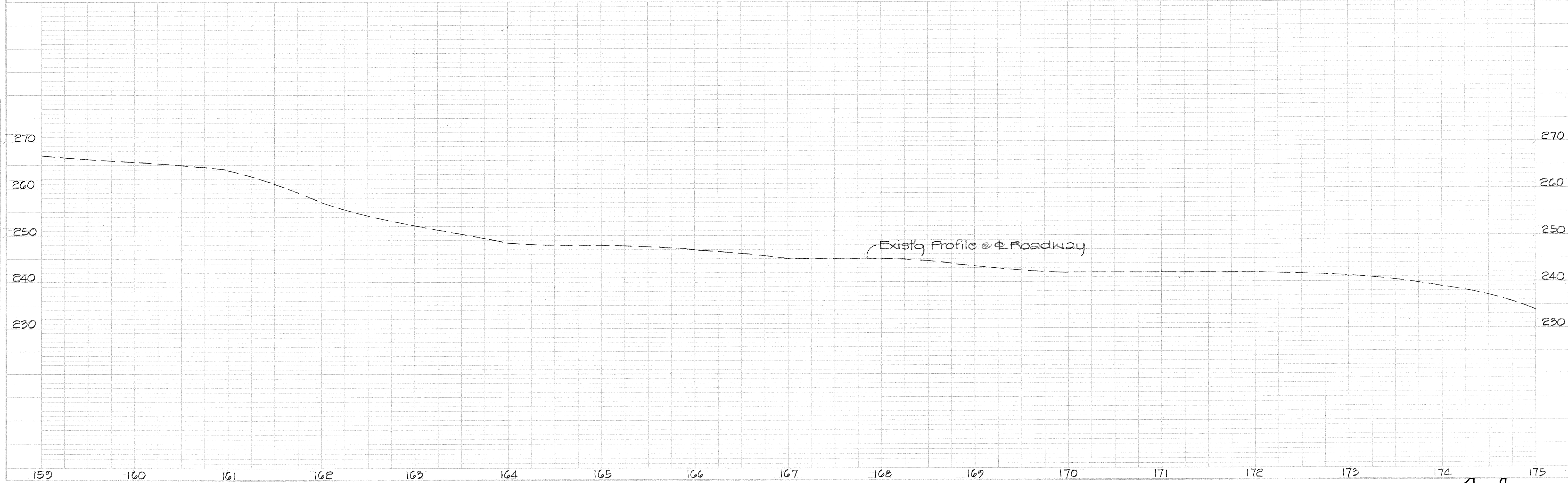
162+10.5 to 163+24
163+36 " 164+62
161+82.5 " 163+46
165+08 " 168+72
165+23.9 " 167+00

Sta. 162+75 to 163+12 Rt. 37.5 L.F. 113.50
Sta. 163+34 to 164+53 Rt. 125.0 L.F. 126
Sta. 164+35 to 164+97 Lt. 62.5 L.F. 163.50
Sta. 165+08 to 168+68 Rt. 362.5 L.F. 364
Sta. 165+09 to 167+15 Lt. 200.0 L.F. 176.20

True North
Scale: 1"=50'

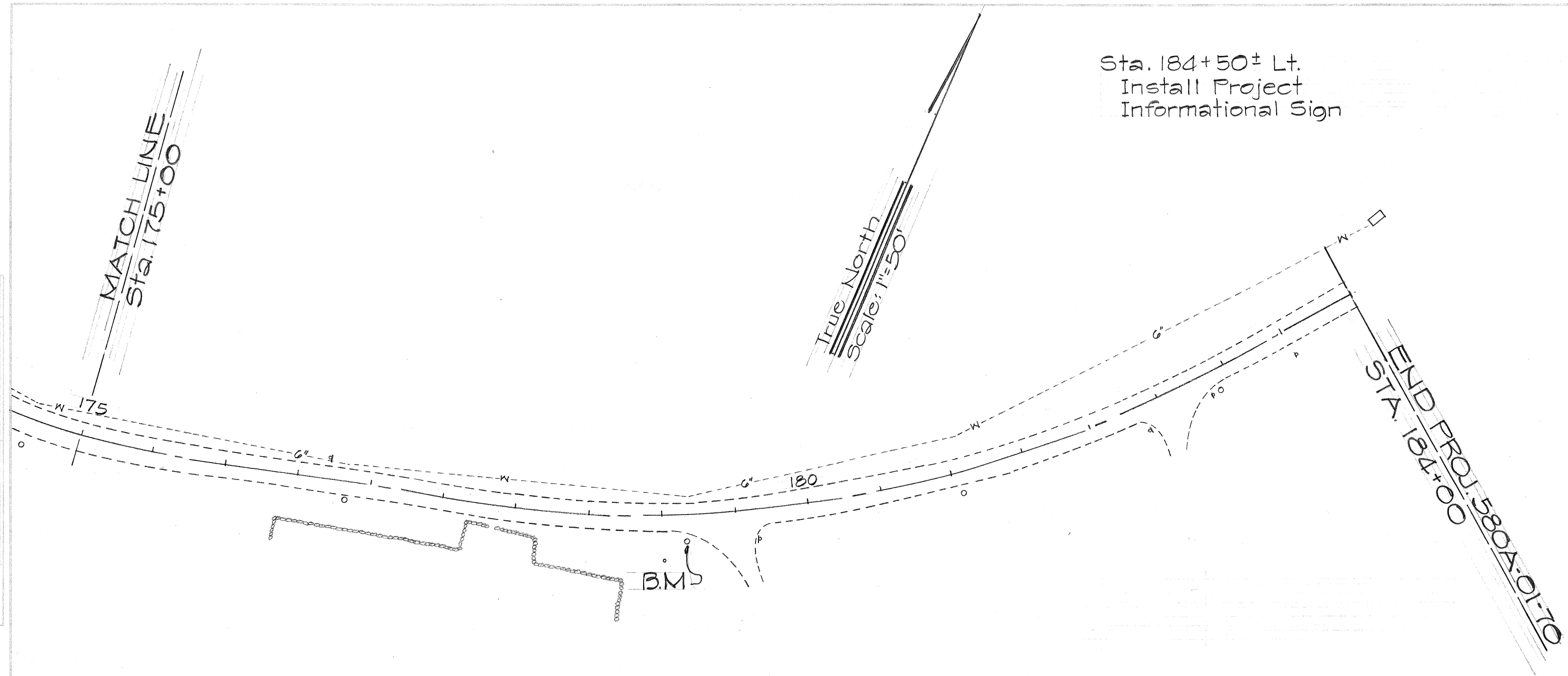


B.M. = Ld. Hd on Pole. Elev. = 238.93



DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	580A-01-70	1970	15	24

PLAN	DATE	BY	CHKD.
	SURVEYED NOTE BOOK RT. OF WAY CHECKED NO.		



B.M. = Ld. Hd. on Pole. Elev. = 220.21

PROFILE	DATE	BY	CHKD.
	SIGNING PLOTTED GRADES CHECKED E. ALL NOTED STRUCTURE NOTED/CHKD NO.		

