





FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-88	1988	30	35

Sta. 674+82 ±  
 Demolish and Remove:  
 Exist. 30" CMP,  
 Exist. CRM Headwalls  
 Construct: 2-Std. CRM Headwalls  
 Install: 42" RCP, Cl. III  
 For details, see Plan Sht. No. \_\_\_\_\_

M. L. STA. 674+40  
 Kailua  
 Install RB w/Post  
 (2 Ea.)

Sta. 685+11  
 Clean: Exist. 24" RCP,  
 Inlet and Outlet

Exist. to Remain  
 Install RM-3 on  
 Exist. Sign Post

Exist. to Remain  
 Sta. 694+58  
 Clean: Exist. 24"  
 RCP Inlet and  
 Outlet

Sta. 705+65  
 Clean: Exist. 18"  
 RCP Inlet  
 and Outlet

Exist. to Remain  
 Install RM-3  
 on Exist.  
 Sign Post

Install RM-1  
 w/Steel Post  
 in Back of  
 Guard Rail  
 (3 Ea.)

Exist. to Remain

Exist. to Remain  
 HANA

KEANAE PENINSULA  
 NEXT 0.2 MILE

Sta. 716+18  
 Clean: Exist. 24" RCP  
 Inlet and Outlet

Exist. to Remain  
 Install RM-3 on  
 Exist. Sign Post

Exist. to Remain  
 Install RM-3 on  
 Exist. Sign Post

Install RM-3  
 on Exist.  
 Sign Post

Remove Exist.  
 Conc. Post &  
 Install RB  
 w/Post

Install RM-1  
 w/Post  
 (8 Ea.)

Install  
 RM-1 w/Steel  
 Post in  
 Back of  
 Guard Rail  
 (11 Ea.)

Replace Exist.  
 w/New RB  
 w/Post

Install  
 RB  
 w/Post

Install RM-3 on  
 Exist. Sign Post

Exist. to Remain  
 CAUTION  
 SLIDE AREA  
 NEXT 5 MILES

Install  
 RM-3 on  
 Exist.  
 Sign  
 Post

Remove Exist. Conc.  
 Post & Install  
 RM-9 w/Post

Sta. 733+03  
 Clean: Exist. 2'x2' Box  
 Culvert, 24" CMP  
 Inlet and Outlet

Install RM-1  
 w/Post (13 Ea.)  
 Install RM-3  
 w/Steel Post  
 (2 Ea.)

Install  
 RB w/Post

OLD CHING STORE

Replace Exist.  
 w/New RB  
 w/Post  
 (4 Ea.)

Install RB  
 w/Post

Sta. 755+74.5  
 Demolish and Remove: Exist. CRM  
 Headwalls, Exist. 24" RCP  
 to remain  
 Construct: Inlet Structure,  
 CRM Outlet Structure  
 Install: 42" RCP, Cl. III  
 For details, see Plan  
 Sht. No. \_\_\_\_\_

Install RM-1  
 w/Steel Post in  
 Back of Guard  
 Rail (5 Ea.)

Replace Exist.  
 w/New RB  
 w/Post

Install RM-1  
 w/Post (5 Ea.)

Sta. 712+15  
 Clean: Exist. 18" RCP,  
 Inlet and Outlet

Remove Exist. Conc.  
 Posts & Install  
 RB w/Post  
 (9 Ea.)

Install RM-1 w/Post (14 Ea.)

Sta. 721+47  
 Clean: Exist. 24" RCP,  
 Inlet and Outlet

Install RB w/Post

Replace Exist. w/New  
 RB w/Post

Install  
 RM-3  
 on RB  
 Exist. Sign Post  
 w/Post

8" White Edge  
 Stripe

Replace Exist.  
 w/New RB  
 w/Post

Exist. to Remain

Install  
 RM-3  
 on Exist. Clean:  
 Sign Post

Sta. 724+60  
 Clean: Exist. 24" RCP,  
 Inlet and Outlet

Sta. 737+42  
 Clean: Exist. 24" RCP,  
 Inlet and Outlet

Install  
 RB  
 w/Post

Install RM-3  
 w/Post (6 Ea.)

Sta. 739+93

Palauhulu Br.

Sta. 743+17  
 Clean: Exist. 24" RCP  
 Inlet and Outlet

Install RM-3  
 w/Post (6 Ea.)

Replace Exist. w/New  
 RB w/Post

Exist. to Remain

SPEED  
 LIMIT  
 30

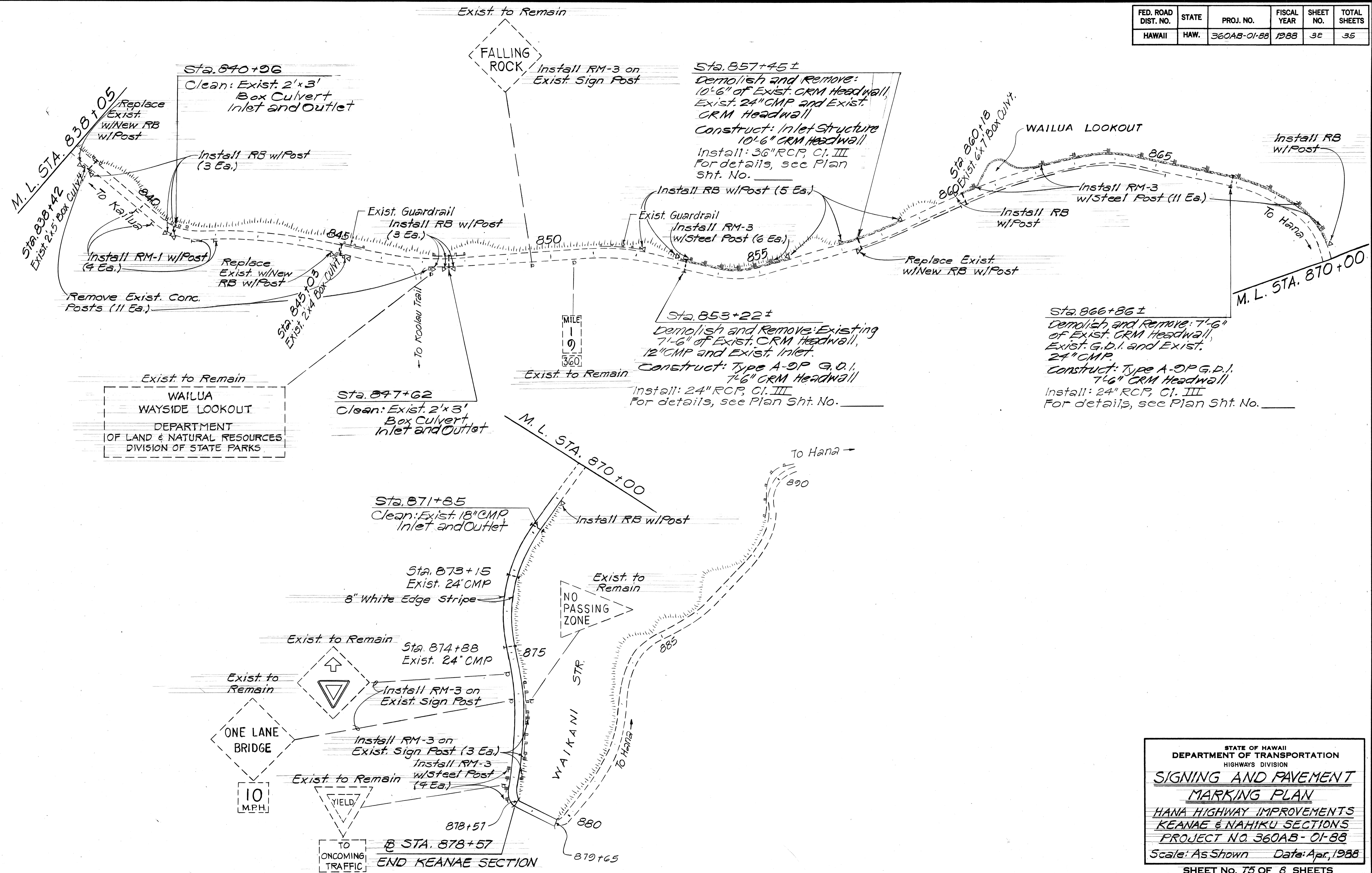
Exist. to Remain  
 Install RM-3 on  
 Exist. Sign Post

STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION  
**SIGNING AND PAVEMENT  
 MARKING PLAN**  
 HANA HIGHWAY IMPROVEMENTS  
 KEANAE & NAHIKU SECTIONS  
 PROJECT NO. 360AB-01-88  
 Scale: As Shown Date: Apr., 1988  
 SHEET NO. 73 OF 8 SHEETS

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



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-88	1988	32	35



Exist to Remain  
**WAILUA  
WAYSIDE LOOKOUT**  
DEPARTMENT  
OF LAND & NATURAL RESOURCES  
DIVISION OF STATE PARKS

MILE  
1  
9  
360

Exist to Remain  
**NO  
PASSING  
ZONE**

Exist to Remain  
**ONE LANE  
BRIDGE**

**10  
MPH**

Exist to Remain  
**YIELD**

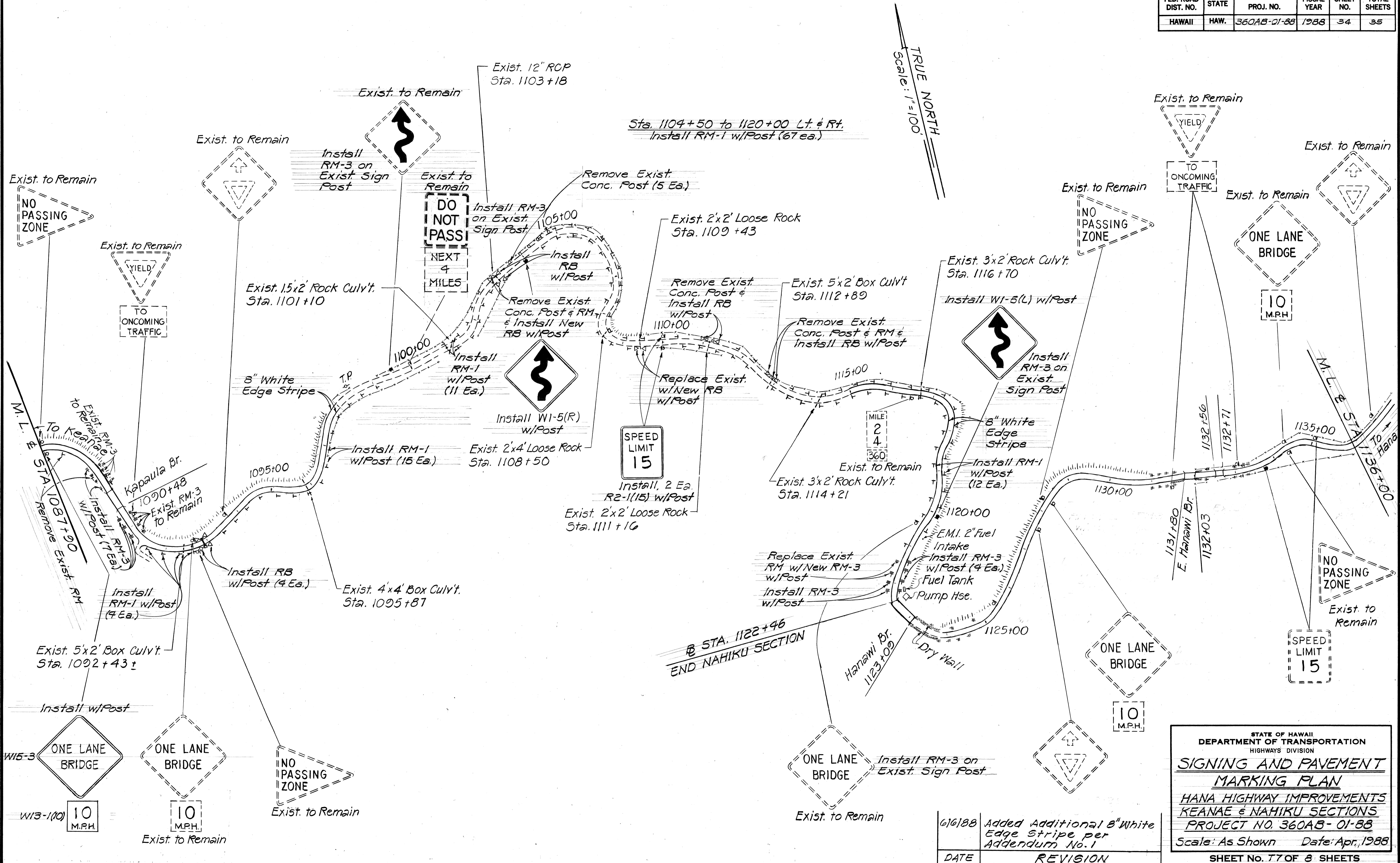
TO  
ONCOMING  
TRAFFIC

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**SIGNING AND PAVEMENT  
MARKING PLAN**  
**HANA HIGHWAY IMPROVEMENTS  
KEANAE & NAHIKU SECTIONS**  
PROJECT NO 360AB-01-88  
Scale: As Shown Date: Apr, 1988  
SHEET No. 75 OF 8 SHEETS

DATE: \_\_\_\_\_  
SURVEYED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
ORIGINAL PLAN No. \_\_\_\_\_  
NOTE BOOK No. \_\_\_\_\_



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-88	1988	34	35



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

DATE	REVISION
6/6/88	Added Additional 8" White Edge Stripe per Addendum No. 1

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING AND PAVEMENT MARKING PLAN**

HANA HIGHWAY IMPROVEMENTS  
KEANAE & NAHIKU SECTIONS  
PROJECT NO. 360AB-01-88

Scale: As Shown Date: Apr. 1988

SHEET NO. 77 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB-01-88	1988	35	35

### CENTERLINE PAVEMENT MARKERS AND STRIPING SUMMARY

APPROXIMATE STATION	CONDITION	STRIPING		PAVEMENT MARKERS		
		4" YELLOW	DBL. 4" YELLOW	TYPE D	TYPE H	TYPE J
590+25 to 655+00	No Passing L&R		6,475	324		
655+00 to 663+00	Passing L&R			20	80	
663+00 to 668+00	No Passing L&R		500	25		
668+00 to 672+00	Passing L No Passing R	400		10	40	10
672+00 to 679+00	No Passing L&R		700	35		
679+00 to 688+00	Passing L No Passing R	900		23	90	23
688+00 to 746+00	No Passing L&R		5,800	290		
746+00 to 749+00	Passing L No Passing R	300		8	32	8
749+00 to 753+00	No Passing L&R		400	20		
753+00 to 759+00	Passing L&R			15	60	
759+00 to 797+00	No Passing L&R			190		
797+00 to 800+00	Passing L No Passing R	300		8		
800+00 to 805+50	No Passing L&R		550	28	32	8
805+50 to 808+00	Passing L&R			7		
808+00 to 817+00	No Passing L&R		900	45		
817+00 to 821+00	Passing L&R			10	40	
821+00 to 878+57	No Passing L&R		5,757			
1043+00 to 1122+46	No Passing L&R		7,946			
TOTAL		1,900	32,828	1,744	402	49

### MILEPOST MARKER SUMMARY

M.P. NO.	LOCATION	QUANTITY	
		W/POST	W/O POST
M.P. 18	799+00 Rt.	1	1

### STATE ROUTE MARKER SUMMARY

ROUTE NO.	LOCATION	QUANTITY	
		W/POST	W/O POST
360	799+00 Rt.		1

### REFLECTOR MARKER SUMMARY

TYPE	QUANTITY		
	W/FLEXIBLE POST	W/STEEL POST	W/O POST
RM-1	250	40	
RM-3	100	40	40
RM-4		1	
RM-9		1	
RB*	150		

\*Yellow Reflective Sheeting Band on White Flexible Delineator Post.

### SCHEDULE OF OBJECT MARKERS

STATION	TYPE OF MARKER	NO. OF UNITS		REMARKS
		W/POST	W/O POST	
764+00 ± Rt.	II		1	Power Pole
765+50 ± Rt.	II		1	Power Pole
811+40 ± Lt.	II		1	Power Pole
808+00 ± Lt.	II		1	" "
804+00 ± Lt.	II		1	" "
801+50 ± Lt.	II		1	" "
800+00 ± Lt.	II		1	" "
797+50 ± Lt.	II		1	" "
795+50 ± Lt.	II		1	" "
794+00 ± Lt.	II		1	" "
790+50 ± Lt.	II		1	" "
771+00 ± Lt.	II		1	" "
761+50 ± Lt.	II		1	" "
760+00 ± Lt.	II		1	" "
758+50 ± Lt.	II		1	" "
755+50 ± Lt.	II		1	" "
752+50 ± Lt.	II		1	" "
749+50 ± Lt.	II		1	" "
746+50 ± Lt.	II		1	" "
732+00 ± Lt.	II		1	" "
715+60 ± Lt.	II		2	Tree
1119+50 ± Lt.	II		1	Power Pole
TOTAL			23	

### PAVEMENT EDGE STRIPING SUMMARY

LOCATION	8" WHITE EDGE STRIPE	12" WHITE STOP LINE	CROSSWALK
658+60 to 673+60	3,000		
723+50 to 747+50	4,800		
771+00 to 788+00	3,400		
801+50 to 816+60	3,020		
810+00 to 811+00 To Wailua Village	280		
796+50		25	2
871+00 to 878+57	1,514		
1082+50 to 1098+00	3,100		
1090+75		10	
1115+00 to 1122+46	1,492		
1043+00 to 1050+50	1,500		
1059+01 to 1076+44	3,300		
TOTAL	25,472	35	2

### CONSTRUCTION SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	QUANTITY	
			W/POST	W/O POST
CW-20-1d	585+00 RT.	ROAD CONSTRUCTION AHEAD	1	
CG-20-2	585+00 LT.	END CONSTRUCTION	1	
CG-20-2	885+00 RT.	END CONSTRUCTION	1	
CW-20-1d	885+00 LT.	ROAD CONSTRUCTION AHEAD	1	
CW-20-1d	1038+00 RT.	ROAD CONSTRUCTION AHEAD	1	
CG-20-2	1038+00 LT.	END CONSTRUCTION	1	
CG-20-2	1127+50 RT.	END CONSTRUCTION	1	
CW-20-1d	1127+50 LT.	ROAD CONSTRUCTION AHEAD	1	

### SCHED. OF REGULATORY AND WARNING SIGNS

STATION	SIGN NO.	MESSAGE	NO. OF UNITS	
			W/POST	W/O POST
606+50 Rt.	W13-1(15)	15 M.P.H.		1
1088+00 Rt.	W15-3	ONE LANE BRIDGE	1	
	W13-1(10)	10 M.P.H.		1
1104+00 Rt.	W1-5(R)	⚡	1	
1110+00 Lt & Rt.	R2-1(15)	SPEED LIMIT 15	2	
1120+00 Lt.	W1-5(L)	⚡	1	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**MISCELLANEOUS SUMMARIES**

HANA HIGHWAY IMPROVEMENTS  
KEANAE & NAHIKU SECTIONS  
PROJECT NO. 360AB-01-88

Date: Apr., 1988

SHEET No. 73 OF 8 SHEETS

6/6/88 Revised Pav't. Edge Striping Summary  
Quantity per Addendum No. 1

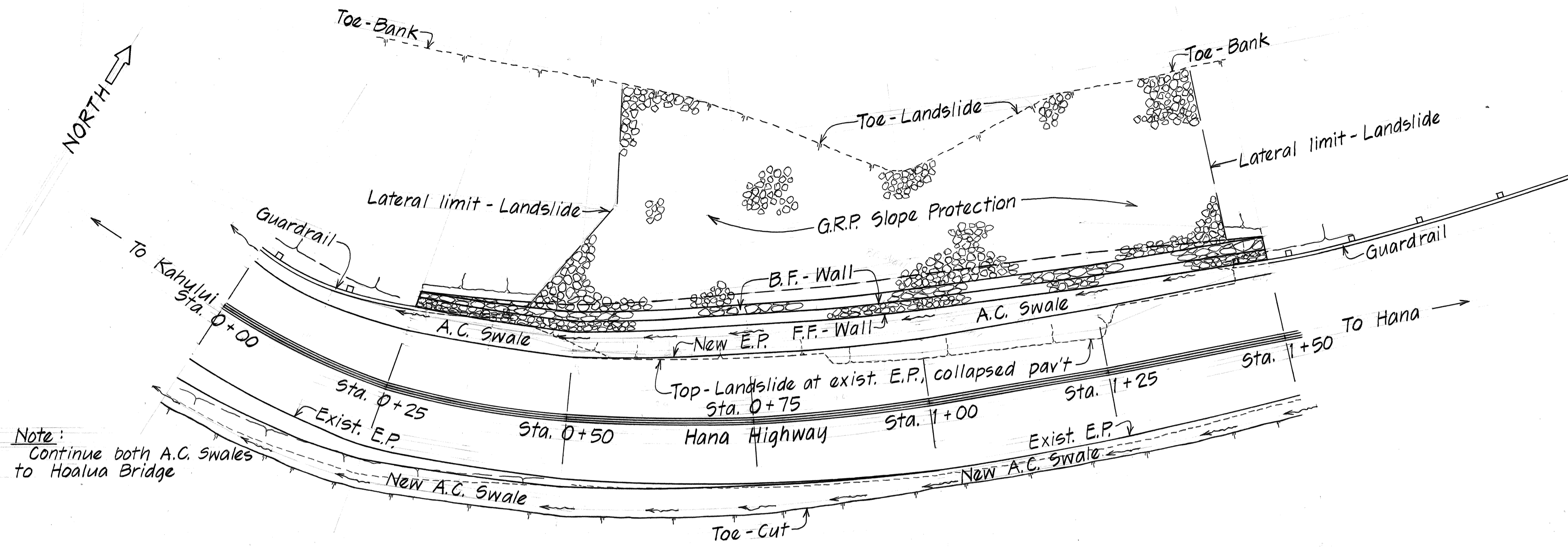
DATE REVISION

DATE  
SURVEY PLOTTED BY  
DESIGNED BY  
CHECKED BY  
NOTE BOOK  
NO.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360AB 01-88	1988	355-1	35

**GENERAL NOTES**

- Elevation of the weepholes to be determined by the Engineer.
- Limits of G.R.P. shall be staked out in the field by the Contractor to the Engineer's approval.
- Existing guardrails shall be removed and delivered to the Keanae Baseyard. Cost for this work shall be considered incidental to Restoration of Guardrail Items.
- Dimensions for the Cutoff Wall shall be 12" x 24" x the entire length of the G.R.P. Slope Protection.
- Furnishing and installing the aggregate base and crushed rock will not be paid for separately, but shall be considered incidental to the A.C. Swale.



Sta. 0+00 Lt. to Sta. 0+25 Lt. Replace existing guardrail, Length = 25 L.F.

Sta. 0+25 Lt. Start C.R.M. wall. Bolt replacement guardrail end thru wall.

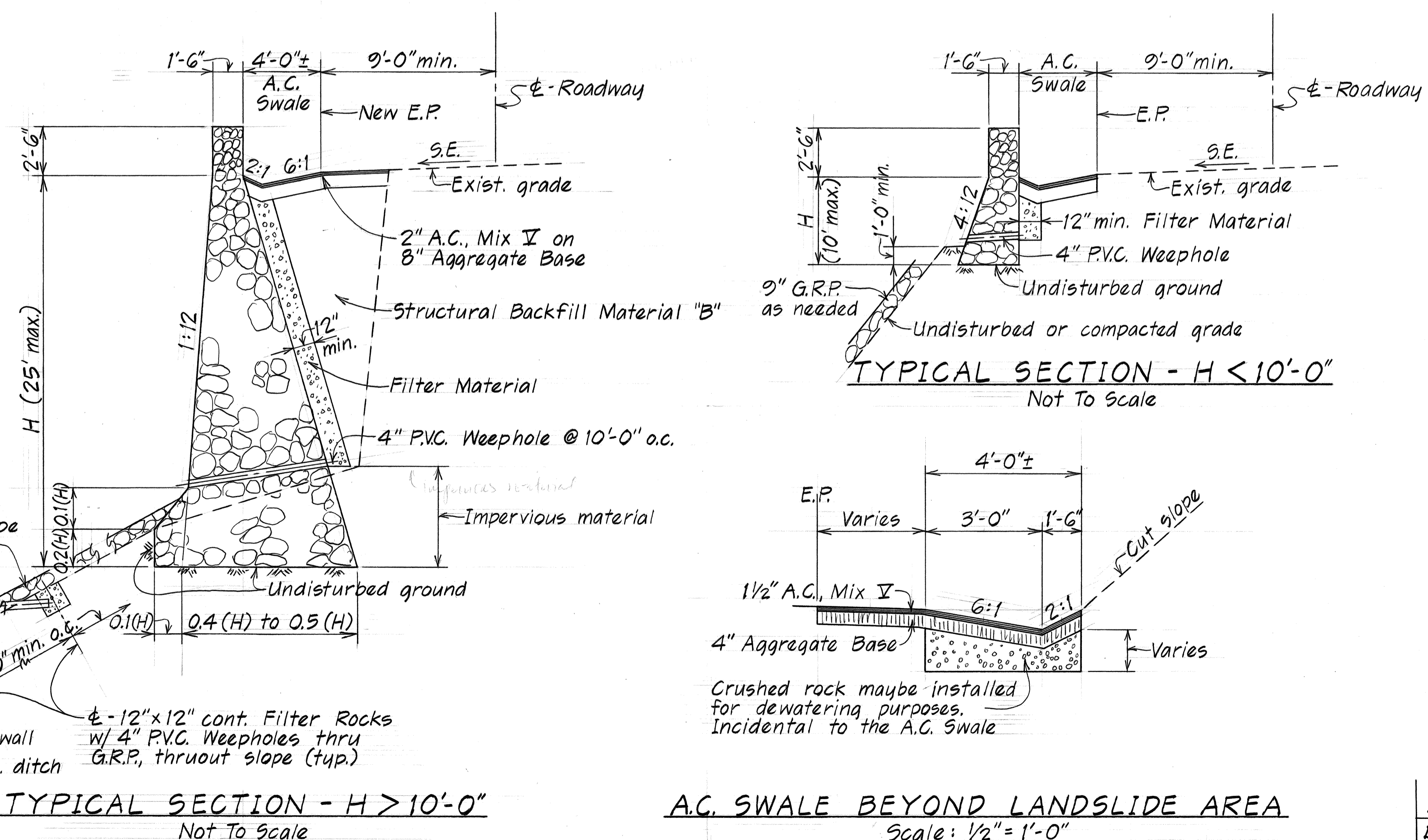
To Sta. 1+50 ± Lt., Rt. Construct A.C. Swale, approx. 800 L.F., terminating at Hoalua Bridge. Final location to be determined in the field by the Engineer.

Sta. 1+50 ± Lt. Connect exist. guardrail to C.R.M. wall

**LAYOUT PLAN**  
Scale: 1" = 10'-0"

**ESTIMATED QUANTITIES**

Item No. 206.1000 - Structure Excavation other than at Bridges:	300 cu.
Item No. 206.8000 - Filter Material:	70 cu.
Item No. 508.0100 - Cement Rubble Masonry:	315 cu.
Item No. 606.1500 - Guardrail Restoration (L.S.)	
Item No. 609.8214 - Bituminous Gutter, Type 7 (61214)	360 sq.
Item No. 612.0200 - Grouted Slope Protection	125 cu.



**TYPICAL SECTION - H > 10'-0"**  
Not To Scale

**A.C. SWALE BEYOND LANDSLIDE AREA**  
Scale: 1/2" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**LANDSLIDE REPAIR PLAN**  
**DETAILS, NOTES, QUANTITIES**  
**HANA HWY. IMPROVEMENTS**  
**KEANAE & NAHIKU SECTIONS**  
**PROJECT NO. 360A-01-88**

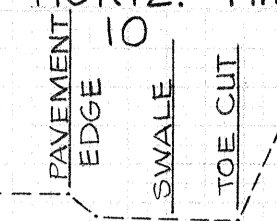
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SHEET NO. 1 OF 3 SHEETS

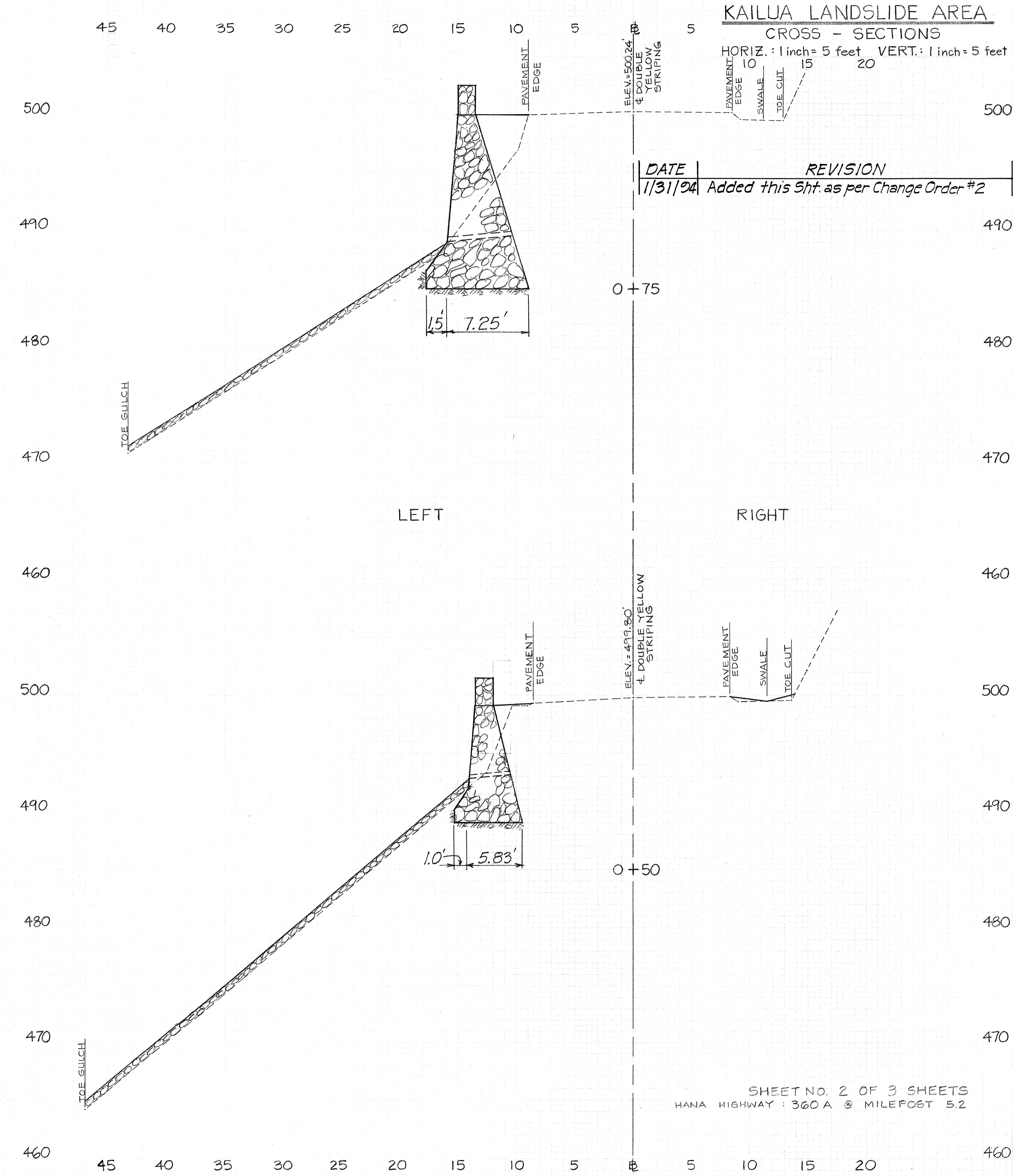
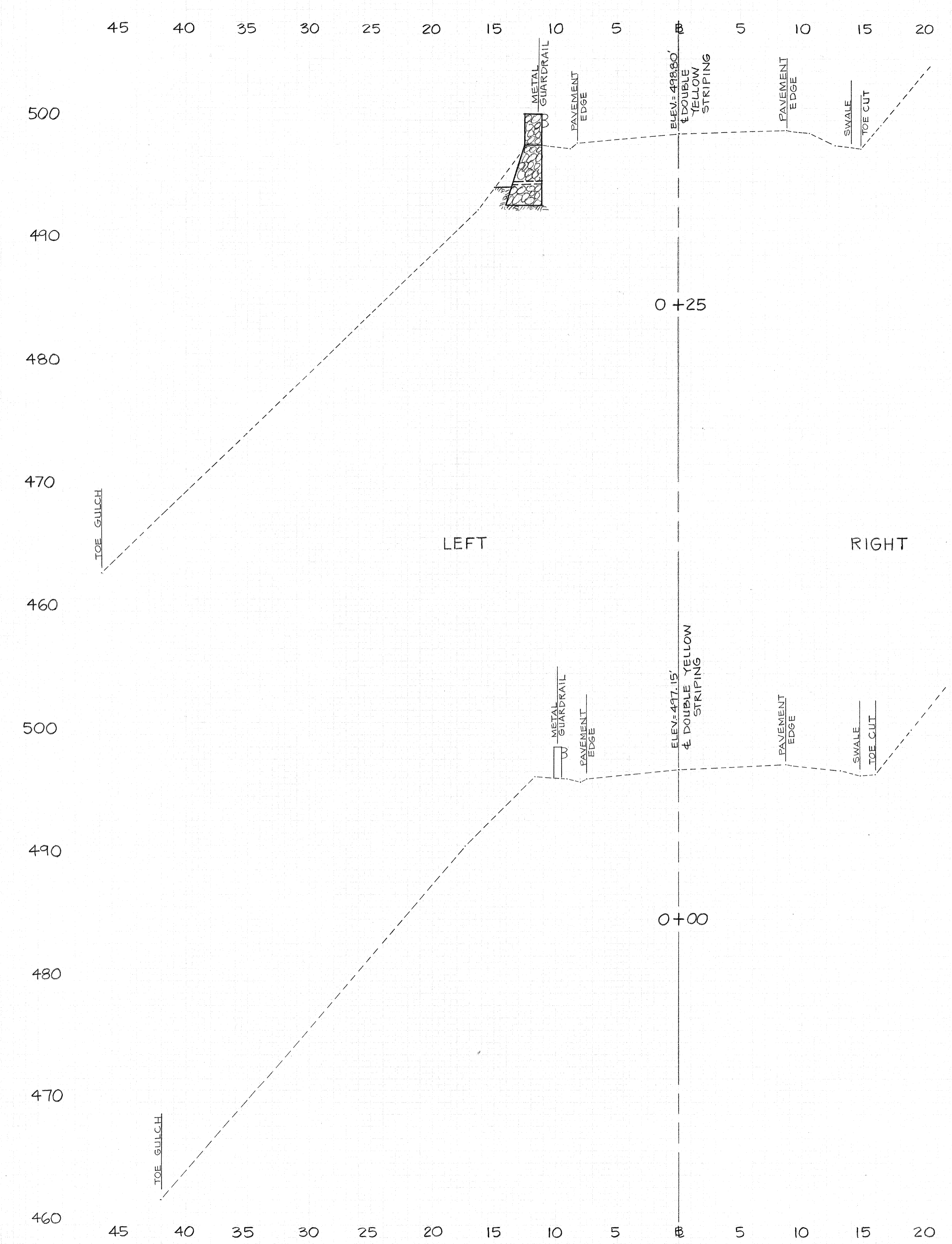
1/31/04 Revised FA Block and Added this Sht. as per Change Order #2  
DATE REVISION

KAILUA LANDSLIDE AREA  
CROSS - SECTIONS

HORIZ. : 1 inch = 5 feet VERT. : 1 inch = 5 feet



DATE	REVISION
1/31/24	Added this Sht. as per Change Order #2



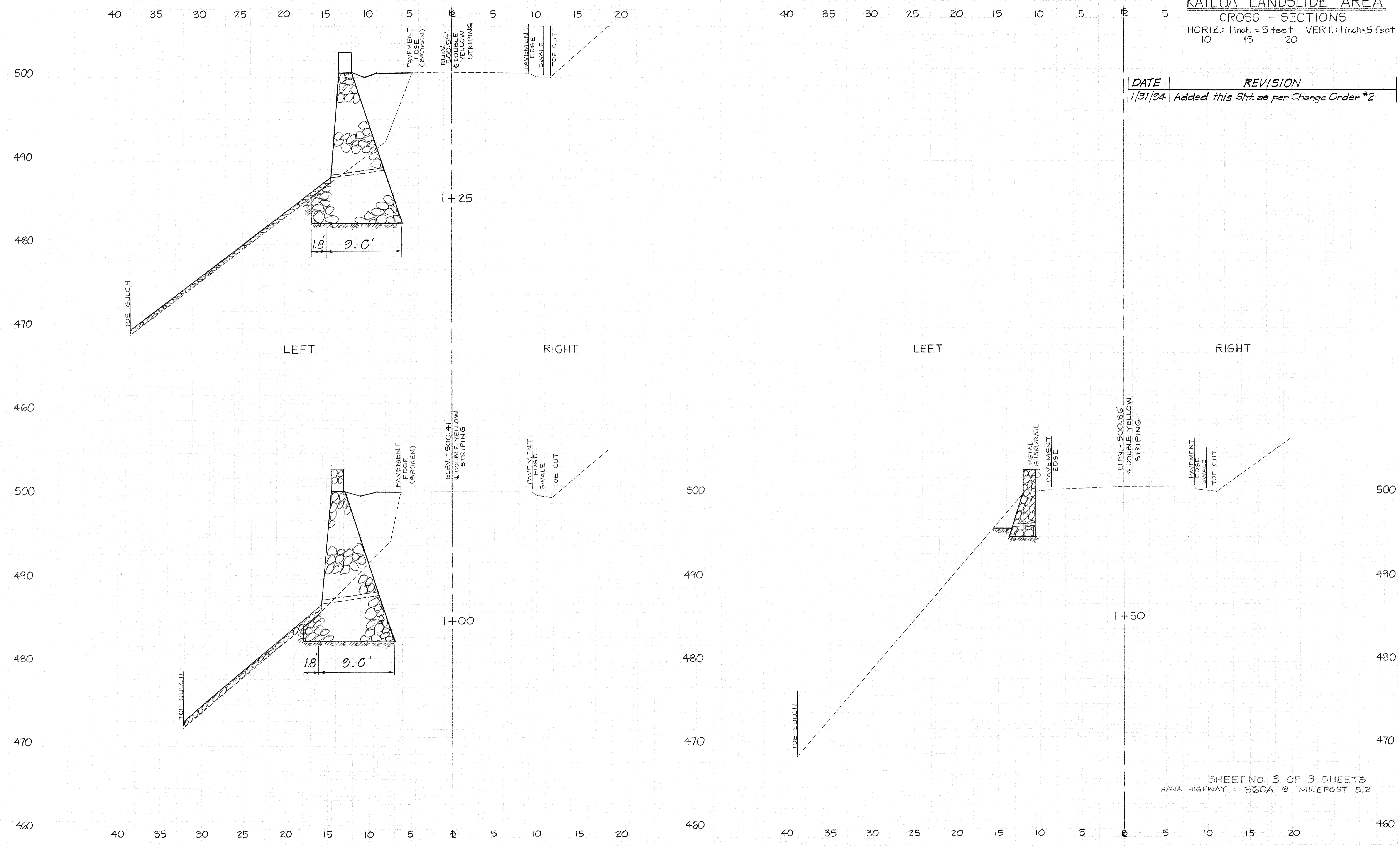
360A Misc. 2  
 11-15  
 CIVIL & SSS  
 CNM  
 21 APR 24  
 27 APR 24

SHEET NO. 2 OF 3 SHEETS  
HANA HIGHWAY : 360A @ MILEPOST 5.2

C.O. ADD. 35S-2

KAILUA LANDSLIDE AREA  
 CROSS - SECTIONS  
 HORIZ.: 1 inch = 5 feet VERT.: 1 inch = 5 feet  
 10 15 20

DATE	REVISION
1/31/04	Added this Sht. as per Change Order #2



2148K 01  
 2148K 01  
 CNM & SSS  
 CNM  
 360A  
 MISC-2  
 P3-11-15

SHEET NO. 3 OF 3 SHEETS  
 HANA HIGHWAY : 360A @ MILEPOST 5.2

C.O. ADD. 35S-3