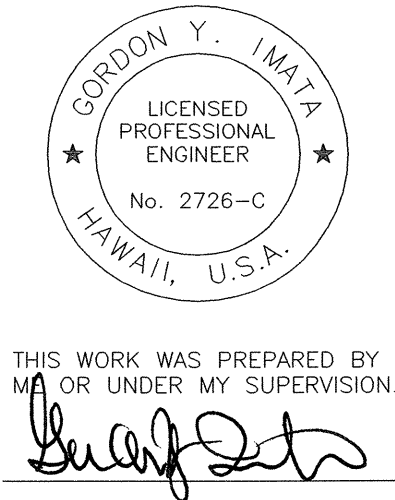


GUARDRAIL SCHEDULE												
FROM	TO	LEFT	RIGHT	LENGTH OF NEW STD. GR. (FT.)	GUARDRAIL END TREATMENT *				GUARDRAIL ** END TREATMENT	GUARDRAILS TO BE REMOVED	GUARDRAILS TO REMAIN	REMARKS
					LEADING	LENGTH	TRAILING	LENGTH				
9+07.5	9+45	●					●	37.5	F-350			
9+45	9+70	●		25								8 FT POSTS
9+70	10+07	●			●	37.5			F-350			
17+15	17+52.5	●					●	37.5	F-350			
17+52.5	18+52.5	●		100								8 FT POSTS
18+52.5	18+90	●			●	37.5			F-350			
20+10	20+47.5	●					●	37.5	F-350			
20+47.5	20+60	●		12.5								
20+60		●			●				MODIFIED "G"			ROUNDED END
32+80	33+17.5	●					●	37.5	F-350			
33+17.5	33+30	●		12.5								8 FT POSTS
33+30	33+67.5	●			●	37.5			F-350			
85+20	85+50	●									30	
85+20	85+50		●								30	
156+80	157+45	●									65	
158+55	159+05	●									50	
159+05	160+05	●		100						50		8 FT POSTS
160+05	160+30	●		25								MODIFIED THRIE BEAM
161+25	161+50	●		25								MODIFIED THRIE BEAM
161+50	162+62.5	●		112.5								
162+62.5	163+00	●			●	37.5			F-350			
175+30	175+80		●								50	
195+30	195+90	●									60	
203+50	204+03	●									53	
208+37.5	208+75		●		●	37.5			F-350			
208+75	211+25		●	250						237.5		
211+25	211+75		●				●	50	ET-2000			
212+16.5	212+29		●	12.5	●				MODIFIED "G"	5		ROUNDED END
212+29	212+54		●	25						25		MODIFIED THRIE BEAM
212+05	212+42.5	●					●	37.5	F-350			
212+42.5	212+55	●		12.5								
212+55	212+80	●		25								MODIFIED THRIE BEAM
218+00	218+25		●	25								MODIFIED THRIE BEAM
218+25	218+37.5		●	12.5								
218+37.5	218+75		●				●	37.5	F-350			
218+00	218+75		●							75		
SUBTOTALS				650 W-BEAM 775 TOTAL	F-350 THRIE-BEAM		11 125LF	MOD. "G" ET-2000		2 1	195	535.5

GUARDRAIL SCHEDULE												
FROM	TO	LEFT	RIGHT	LENGTH OF NEW STD. GR. (FT.)	GUARDRAIL END TREATMENT *				GUARDRAIL ** END TREATMENT	GUARDRAILS TO BE REMOVED	GUARDRAILS TO REMAIN	REMARKS
					LEADING	LENGTH	TRAILING	LENGTH				
218+00	218+75	●								75		
218+00	218+25	●		25								MODIFIED THRIE BEAM
218+25	218+37.5	●		12.5								
218+37.5	218+75	●			●	37.5			F-350			
235+35	235+72.5	●					●	37.5	F-350			
235+72.5	241+47.5	●		575								8 FT POSTS
241+47.5	242+07.5	●			●	37.5			F-350			
242+07.5	242+45	●								50		
245+56	245+93.5	●								37.5		
245+56	245+93.5	●					●	37.5	F-350			
245+93.5	247+43.5	●								50		
247+43.5	248+43.5	●		100								
248+43.5	248+81	●			●	37.5			F-350			
258+80	260+55	●									175	
260+55	260+67.5	●		12.5								
260+67.5		●			●				TYPE "G"			
267+50	267+87.5	●					●	37.5	F-350			
267+87.5	269+00	●		112.5								
269+00	271+00	●		200								8 FT POSTS
271+00	272+50	●		150								
272+50	274+00	●		150								8 FT POSTS
274+00	274+37.5	●		375								
274+37.5	275+00	●			●	37.5			F-350			
409+00	409+37.5	●								37.5		
409+00	409+37.5	●					●	37.5	F-350			
409+37.5	414+62.5	●		525						525		
411+00	411+37.5	●			●	37.5			F-350			
411+37.5	411+62.5	●		25								
411+62.5	412+00	●					●	37.5	F-350			
415+90	416+27.5	●			●	37.5			F-350			
416+27.5	416+52.5	●		25								
416+57.5	416+90	●					●	37.5	F-350			
416+00	416+37.5	●					●	37.5	F-350			
416+37.5	416+50	●									12.5	
416+50	416+87.5	●			●	37.5			F-350			
416+25	416+37.5	●								12.5		
416+50	416+62.5	●								12.5		
SUBTOTALS					2262.5 W-BEAM 2287.5 TOTAL	F-350 THRIE-BEAM	14 25LF	TYPE "G" ET-2000	1 0	625	287.5	

ORIGINAL PLAN	NOTE BOOK	Noted by Design	SURVEY PLOTTED BY	DATE
			DESIGNED BY	
			CHECKED BY	

NOTES: 1. The Engineer shall modify guardrail designs to fit the existing field conditions.
2. Actual radius and locations shall be determined in the field by the Contractor and approved by the Engineer prior to the ordering of curved guardrail sections.
Curved guardrail sections shall be ordered in a timely manner to complete the Project within the contract completion date.
* Length of guardrail end treatment.
** FLEAT-350 Abbreviated as F-350



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL SCHEDULE

KUHIO HIGHWAY
SHOULDER IMPROVEMENTS
Haena to Princeville
Project No. 560A-03-99

Scale: None Date: February, 2002

SHEET No. 1 OF 2 SHEETS

GUARDRAIL SCHEDULE														
FROM	TO	LEFT	RIGHT	LENGTH OF NEW STD. GR. (FT.)	GUARDRAIL END TREATMENT *				GUARDRAIL ** END TREATMENT	GUARDRAILS TO BE REMOVED	GUARDRAILS TO REMAIN	REMARKS		
					LEADING	LENGTH	TRAILING	LENGTH						
419+30	419+67.5	●			●	37.5			F-350					
419+67.5	419+92.5	●		25										
419+02.5	420+30	●					●	37.5	F-350					
419+40	419+77.5	●					●	37.5	F-350					
419+65.5	420+02.5	●		25										
420+02.5	420+40	●			●	37.5			F-350					
421+50	421+87.5	●			●	37.5			F-350					
421+87.5	422+12.5	●		25										
422+12.5	422+50	●					●	37.5	F-350					
421+65	422+02.5	●					●	37.5	F-350					
422+02.5	422+15	●		12.5										
422+15	422+52.5	●			●	37.5			F-350					
427+40	427+90	●			●	50			ET-2000					
427+90	429+02.5	●		112.5										
	429+02.5	●					●		MODIFIED "G"			ROUNDED END		
427+80	428+17.5	●					●	37.5	F-350					
428+17.5	428+55	●		37.5										
428+55	428+92.5	●			●	37.5			F-350					
436+00	436+50	●			●	50			ET-2000					
436+50	436+75	●		25										
436+75	437+25	●					●	50	ET-2000					
436+00	436+37.5	●			●	37.5			F-350					
436+37.5	436+87.5	●		50										
436+87.5	437+25	●					●	37.5	F-350					
442+60	442+97.5	●					●	37.5	F-350					
442+97.5	447+47.5	●		450								8' POSTS		
447+47+5	447+85	●			●	37.5			F-350					
442+60	447+85	●								525				
443+70		●			●				MODIFIED "G"			ROUNDED END		
443+70	444+32.5	●		62.5										
	444+32.5	●					●		MODIFIED "G"			ROUNDED END		
449+80	450+17.5	●			●	37.5			F-350					
450+17.5	450+55	●		62.5										
450+55	450+80	●					●		MODIFIED "G"					
449+90	450+15	●					●	37.5	F-350					
450+15	451+15	●		75										
451+15	451+40	●			●	37.5			F-350					
453+50	453+87.5	●					●	37.5	F-350					
453+87.5	454+12.5	●		25										
454+12.5	454+50	●			●	37.5			F-350					
SUBTOTALS					987.5 W-BEAM		F-350	19	MOD. "G"		4	525	0	
					THRIE-BEAM		0	ET-2000		3				

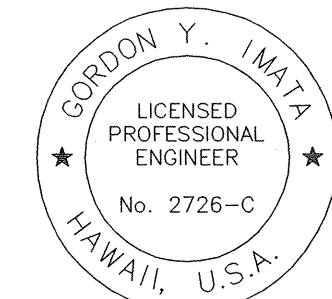
NOTES: 1. The Engineer shall modify guardrail designs to fit the existing field conditions.

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* Length of guardrail end treatment.

** FLEAT-350 Abbreviated as F-350

GUARDRAIL SCHEDULE												
FROM	TO	LEFT	RIGHT	LENGTH OF NEW STD. GR. (FT.)	GUARDRAIL END TREATMENT *				GUARDRAIL ** END TREATMENT	GUARDRAILS TO BE REMOVED	GUARDRAILS TO REMAIN	REMARKS
					LEADING	LENGTH	TRAILING	LENGTH				
457+90	458+27.5	●					●	37.5	F-350			
458+27.5	458+52.5	●		25								
458+52.5	458+90	●			●	37.5			F-350			
471+10	488+47.5	●								1737.5		
470+10	470+47.5	●					●	37.5	F-350			
470+47.5	488+35	●		1787.5								8' POSTS
488+35	488+72.5	●			●	37.5			F-350			
491+12	498+00	●								688		
491+00	491+37.5	●					●	37.5	F-350			
491+37.5	497+62.5	●		625								
497+62.5	498+00	●			●	37.5			F-350			
499+50	504+25	●								475		
499+50	499+87.5	●					●	37.5	F-350			
499+87.5	503+87.5	●		400								
503+87.5	504+25	●			●	37.5			F-350			
506+75	507+62.5	●								87.5		
506+75	507+25	●			●	50			ET-2000			
507+25	507+50	●		25								
507+50	507+87.5	●					●	37.5	F-350			



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

[Signature]

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL SCHEDULE

KUHIO HIGHWAY
SHOULDER IMPROVEMENTS
Haena to Princeville
Project No. 560A-03-99

Scale: None Date: February, 2002

SHEET No. 2 OF 2 SHEETS