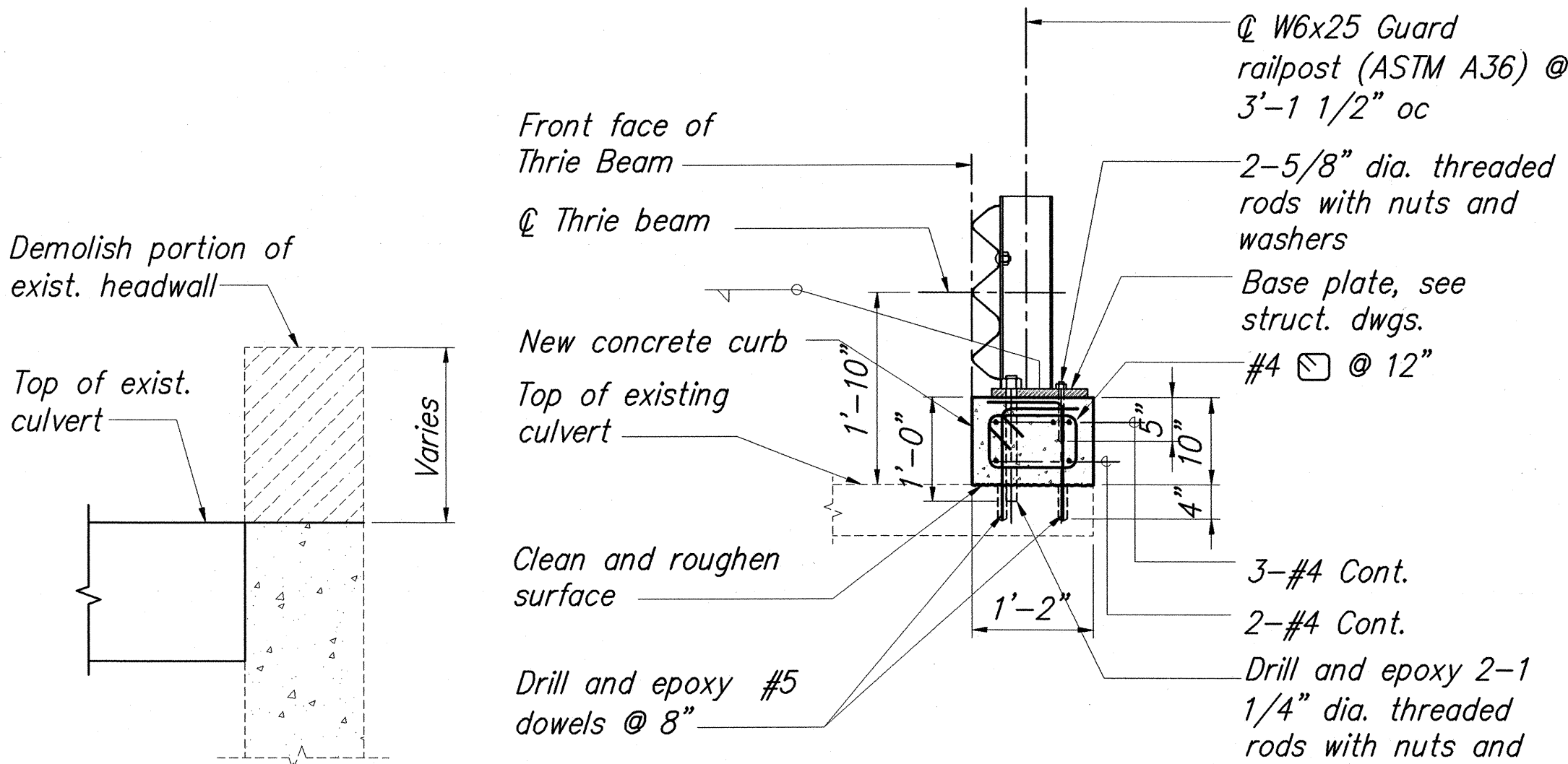


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-019-2(55)	2004	18	112

GUARDRAIL SCHEDULE												
GUARDRAIL NO.	LOCATION		OFFSET FROM $\varnothing$ (FT.)		REMOVE (L.F.)	INSTALL (L.F.)	THRIE BEAM (L.F.)	RUBRAIL (L.F.)	RESET POST (EA)	END TREATMENTS		REMARKS
	FROM	TO	LEFT	RIGHT						LEADING	TRAILING	
1	13+59.3	13+43.3	23		87.5					ET-2000	THRIE	
2	34+63.52	35+76.02	23		100	50				THRIE	FLEAT-350	
3	35+11	35+88.52		23					12	Conn. to exist.	THRIE	Install sand barrels
4	37+55.33	38+67.83	23		100	37.5				A-1	THRIE	
5	37+55.33	38+30.33		23	75					THRIE	A-1	
6	49+23	50+98		14.5	137.5	100				G	THRIE	
7	50+36	51+36	14.5		50	37.5				THRIE	FLEAT-350	
8	51+33	53+20.5		14.5	125	112.5				THRIE	G	
9	51+70.5	53+95.5	14.5		162.5	162.5				FLEAT-350	THRIE	
10	64+53	70+40.5	23		75				43	THRIE	FLEAT-350	
11	70+25	71+12.5		23	100	12.5				A-1	THRIE	
12	73+75.89	76+63.39	23		75				19	FLEAT-350	THRIE	
13	79+78	80+03	23							THRIE	Conn. to exist.	
14	81+88.5	82+63.50	23		62.5					A-1	THRIE	
15	81+97.5	82+72.5		23	62.5					THRIE	A-1	
16	90+80.5	0+18							56			
17	91+84.5	96+84.5		4-22	87.5	400				ET-2000	G	
18	11+71.5	12+21.5		17						A-1	A-1	
19	11+89	12+39	18		25					A-1	A-1	
20	22+16.04	23+19.04	18		212.5	12.5				THRIE	FLEAT-350	
21	22+19.04	23+19.04		18	100	37.5				FLEAT-350	THRIE	
22	23+19.04	27+00.66	14				382					Kukaiau Bridge
23	23+19.04	27+00.66		14			382					Kukaiau Bridge
24	27+00.66	27+75.66	18		75					G	THRIE	
25	27+00.66	28+38.16		18	112.5	62.5				THRIE	G	
26	28+10	29+10	18			25				FLEAT-350	FLEAT-350	
27	30+66	32+91	17		50	112.5	25			G	FLEAT-350	
28	31+05.75	34+68.25		18	50	212.5	87.5			FLEAT-350	THRIE	
29	33+18.25	34+68.25	18		62.5	75				THRIE	G	6 conc. posts
30	34+68.25	35+11.75	14				43.5					Mohuna Bridge
31	34+68.25	35+11.75		14			43.5					Mohuna Bridge
32	35+11.75	39+11.75	17		400	337.5				FLEAT-350	THRIE	41 conc. posts
33	35+11.75	39+86.75		18-20		400				THRIE	G	
34	45+52.5	53+65	17		537.5	712.5				G	A-1	48 conc. posts
35	154+97.5	155+85	15.5			12.5				THRIE	A-1	
36	154.97.5	155+85		11.5	50	12.5				A-1	THRIE	
37	156+60	157+85	15.5		37.5	50				A-1	THRIE	
38	156+60	158+60		11.5		125				THRIE	G	
39	162+00	163+37.5	23			37.5				A-1	G	
40	163+95	167+57.5	19.5		137.5	275				FLEAT-350	A-1	
41	165+24	167+24		18.5	62.5	112.5				A-1	FLEAT-350	

GUARDRAIL TOTALS		
Item No.	Pay Item	Estimated Qty.
606.3100	Reset Guardrail Post and and Replace Spacer Block	130 EA.
606.3111	Type 3 - Strong Post W-Beam	3,506 L.F.
606.3220	Type 3 - Thrie Beam Guardrail w/ Pedestal Posts	964 L.F.
606.3310	Type 3 - Thrie Beam Transition	27 EA.
606.7000	Terminal Section, Type FLEAT-350	14 EA.
606.7010	Terminal Section, Modified Type "G"	11 EA.
606.7020	Terminal Section, ET-2000 PLUS or SKT-350	2 EA.
606.7030	End Anchorage, Modified Type "A-1" Flare	16 EA.

Note: Terminal Section, "SKT-350" may be used in lieu of "ET-2000 PLUS"

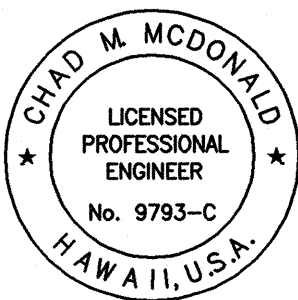


Note: Existing reinforcing shall not be damaged/ cut when drilling.

DEMOLITION @ HEADWALL
Not to Scale

THRIE BEAM METAL RAILING @ HEADWALL
Scale: 3/4" = 1'-0"

SURVEY PLOTTED BY	DATE	1/04
DRAWN BY	E.M.	
DESIGNED BY	C. MCDONALD	
QUANTITIES BY	C. MCDONALD	
CHECKED BY	E. BA	
ORIGINAL PLAN		
NOTE BOOK		
No.		



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Chad M. McDonald
MITSUNAGA & ASSOCIATES

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL SCHEDULE

HAWAII BELT ROAD RESURFACING
East Paquilo Bridge to Kaala Bridge
Federal Aid-Project No. NH-019-2(55)

Scale: As Noted Date: April 2004

SHEET No. C-16 OF 49 SHEETS