PROJ. REFERENCE NO.	SHEET NO.
R-977A	3-P

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF FLARE TO END OF FLARE.

COMPUTED BY: S.C.B. DATE: AUGUST 14, 2004
CHECKED BY: T.A.M. & B.D.K. DATE: AUGUST 14, 2004

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W		ANCHORS										IMPACT ATTENUATOR TYPE 350	SINGLE FACED CONCRETE BARRIER	REMOVE EXISTING GUARDRAIL	REMOVE & STOCKPILE EXISTING GUARDRAIL	COMMENTS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	GRAU-350	M-350	CAT-1	TYPE III	TYPE XI MOD.	TYPE XIII	TYPE VI MOD.	BIC	TERM. SECT.	AT-1					
-LCIB-	9+80	12+43.7 -Y-	RT	133.35	57.15		10+10	12+43.7 -Y-	3.8	4.8	15.24	0	0.3	0	1														TIE TO EXIST. GR ON -Y-
-LCIB-	9+95	11+35	LT	140.97			11+05	10+15	3.8	4.8	15.24	15.24	0.3	0.3	2														
-LCIB-	12+10.9 -Y-	14+75.7	RT	255.27	38.10		12+30.9 -Y-	BRIDGE	3.6	4.6	0	0	0	0				1											TIE TO EXIST. GR ON -Y-
-LCIB-	13+06.5	10+73 -YICIB-	LT	217.17	30.48		10+47.5-YIREV-	13+60	3.6/2.4	4.6/3.4	15.24	15.24	0.3	0.3	2														
-LCIB-	14+89.6	13+84 -YICIB-	LT	445.77	22.86		BRIDGE	13+84 -YICIB-	3.6/2.4	3.6/3.4	0	15.24	0	0.3	1			1											GR ENDS AT SHL'D. PULLOFF
-LCIB-	17+05.3	17+94	RT	87.63			BRIDGE	BRIDGE	3.0	4.6	0	0	0	0				2											
-LCIB-	17+17	18+00	MED RT	64.77			BRIDGE	BRIDGE	3.0	4.6	0	0	0	0				2											
-LCIB-	18+48	19+25.8	RT	80.01			BRIDGE	BRIDGE	3.6	4.6	0	34.29	0	0.69	1			1											
-LCIB-	18+55	19+17	MED RT	64.77			BRIDGE	BRIDGE	3.6	2.4	15.24	0	0.3	0	1			1											
-LCIB-	22+96	23+87	RT	91.44			BRIDGE	BRIDGE	3.6	5.2	15.24	0	0.3	0	1			1											
-LCIB-	23+41	23+80.5	LT	38.10			BRIDGE	BRIDGE	3.6	5.2	0	15.24	0	0.3	1			1											
-LCIB-	25+54	29+57-LREV-	RT	438.15			BRIDGE	BRIDGE	3.6	5.2	0	15.24	0	0.3	1			1											
-LCIB-	25+47	25+81-LREV-	MED RT	91.44			BRIDGE	BRIDGE	3.6	2.4	15.24	0	0.3	0		1		1											
-LREV-	33+82.5	38+77.5	RT	495.30			34+20	38+40	3.6	4.6	15.24	15.24	0.3	0.3	2														
-LREV-	39+78.2	40+69.6	RT	91.44			BRIDGE	BRIDGE	3.6	4.6	15.24	0	0.3	0	1			1											
-LREV-	40+21.2	40+63.1	MED. RT	41.91			BRIDGE	BRIDGE	3.6	2.4	0	34.29	0	0.69		1		1											
-LREV-	41+94	42+74.3	MED. RT	80.01			BRIDGE	BRIDGE	3.6	2.4	15.24	0	0.3	0		1		1											
-LREV-	42+00	47+77.5	RT	571.50			BRIDGE	47+40	3.6	4.6	0	15.24	0	0.3	1			1											
-LREV-	13+80 -Y4-	50+97.5	RT	160.02	15.24		13+60 -Y4-	50+60	2.4/3.6	3.4/4.6	15.24	15.24	0.3	0.3	2														
-LREV-	52+42.5	58+97.5	RT	666.75			52+80	58+60	3.6	4.6	15.24	15.24	0.3	0.3	2														
-LREV-	61+10.0	62+07.5	RT	99.06			61+47.5	61+70	3.6	4.6	15.24	15.24	0.3	0.3	2														
-LREV-	63+02.5	64+77.5	RT	171.45			63+40	64+40	3.6	4.6	15.24	15.24	0.3	0.3	2														
-LREV-	66+65.9	67+56	RT	87.63			BRIDGE	BRIDGE	3.6	4.6	15.24	0	0.3	0	1			1											
-LREV-	67+12.6	67+52	MED. RT	41.91			BRIDGE	BRIDGE	3.6	2.4	0	15.24	0	0.3		1		1											
-LREV-	69+69.4	70+57.6	MED. RT	87.63			BRIDGE	BRIDGE	3.6	2.4	15.24	0	0.3	0		1		1											
-LREV-	69+74.5	73+17.5	RT	327.66			BRIDGE	72+80	3.6	4.6	15.24	15.24	0.3	0.3	3			1											DRIVE OPENING AT 71+20
-LREV-	81+62.5	10+77.5 -Y9R-	RT	201.93	30.48		82+00	10+67 -Y9R-	3.6/1.2	4.6/2.2	15.24	15.24	0.3	0.3	2														GR TERMINATES AT DRIVE
-LREV-	11+00 -Y9R-	84+97.5	RT	163.83	38.10		10+90 -Y9R-	84+60	1.2/3.6	2.2/4.6	15.24	15.24	0.3	0.3	2														
-LREV-	81+92.5	83+17.5	MED. RT	125.73			82+30	82+80	3.6	2.4	15.24	15.24	0.3	0.3	2														
-Y3-	13+00	13+94	RT	95.25			13+30	13+70	2.4	3.4	15.24	15.24	0.3	0.3	2														
-Y3-	15+20	18+50	RT	327.66			15+50	18+20	2.4	3.4	15.24	15.24	0.3	0.3	2														
-Y6REV-	12+61.5	13+04.5 -Y6-	LT	45.72			12+73	12+73	2.4	3.4	15.24	15.24	0.3	0.3	2														
-Y6-	16+10	17+22	LT	99.06	15.24		OFF PROJ. LIMIT	16+40	2.4	3.4	N/A	15.24	0.3	0.3	1									1					GR TERMINATES AT DRIVE
-Y8-	10+05	10+54	RT	19.05	45.72		WIDENING	DEAD-END	0.6	1.5	15.24	7.62	0.3	0.3										2					
			SUB-TOTAL	6149.34	293.37										40	5		20						3					
	LESS ANCHORS:	GRAU-350	40 @ 15.240=	-609.6	-15.24																								
		M-350	5 @ 11.430=	-57.15																									
		AT-1	3 @ 1.905=	-5.715	-3.81																								
		TYPE III	20 @ 7.620=	-152.40																									
			TOTAL	5324.545	274.32										40	5		20						3					
			SAY	5334.00	278.13		ADDITIONAL	GUARDRAIL POSTS = 10 EA.																					
-LCIB-	15+93.6	10+06 -YICIB-	LT				BRIDGE	10+56 -YIREV-	3.6/2.4	4.6/3.4	0	0	0	0															(FUTURE)
-LCIB-	17+19	18+08	LT				BRIDGE	BRIDGE	3.0	4.6	0	0	0	0															(FUTURE)
-LCIB-	18+67	19+45	LT				BRIDGE	BRIDGE	3.6	5.2	15.24	0	0.3	0															(FUTURE)
-LCIB-	23+48.5	23+74	MED LT				BRIDGE	BRIDGE	3.6	5.2	0	11.43	0	1.22															(FUTURE)
-LCIB-	25+44	25+86-LREV-	MED LT				BRIDGE	BRIDGE	3.6	1.8	0	11.43	0	1.22															(FUTURE)
-LCIB-	25+34	25+66-LREV-	LT				BRIDGE	BRIDGE	3.6	5.2/4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	34+05	37+87.5	LT				37+50	34+05	3.6	4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	40+28.81	40+56.7	MED. LT				BRIDGE	BRIDGE	1.2	1.8	0	11.43	0	1.22															(FUTURE)
-LREV-	41+66.6	43+10	LT				42+72.5	BRIDGE	3.6	4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	41+72	42+82.0	MED. LT				BRIDGE	BRIDGE	3.6	1.8	11.43	0	1.22	0															(FUTURE)
-LREV-	43+60	44+37.5	LT				44+00	43+60	3.6	4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	45+65	48+05	LT				47+67.5	43+65	3.6	4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	49+80	51+27.5	LT				50+90	49+80	3.6	4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	52+90	58+67.5	LT				58+30	52+90	3.6	4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	63+90	65+80	LT				65+42.5	63+90	3.6	4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	66+80	67+48.7	LT				BRIDGE	66+80	3.6	4.6	0	0	0	0															(FUTURE)
-LREV-	67+20.2	67+51.5	MED. LT				BRIDGE	BRIDGE	1.2	1.8	0	11.43	0	1.22															(FUTURE)
-LREV-	69+53.6	72+15	LT				71+77.5	BRIDGE	3.6	4.6	15.24	0	0.3	0															(FUTURE)
-LREV-	69+59.8	70+65.3	MED. LT				BRIDGE	BRIDGE	1.2	1.8	11.43	0	1.22	0															(FUTURE)
-LREV-	81+50	82+67.5	LT				82+30	81+50	3.6	4.6	15.24	0	0.3	0															
-LREV-	84+65	85+60	LT				85+22.5	84+65	3.6	4.6	15.24	0	0.3	0															

LOCHNER
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