GUARDRAIL SUB-SUMMARY

CALCULATIONS
MADE BY _____ DATE____
CHECKED _____ DATE____

LAKE COUNTY
LAK-2-14.38

OHIO
FHWA REGION 5
FEDERAL PROJECT

REFERENCE NO.	COST PARTICIPATION CODE	EXISTING LOCATIONS STATION FROM	EXISTING LOCATIONS STATION TO	PROPOSED LOCATIONS STATION FROM	PROPOSED LOCATIONS STATION TO	SIDE	202 GUARDRAIL REMOVED LIN. FT.	606 GUARDRAIL, TYPE 5 LIN. FT.	606 BARRIER GUARDRAIL TYPE 5 LIN. FT.	606 ANCHOR ASSEMBLY, TYPE A EACH	606 ANCHOR ASSEMBLY, TYPE A BARRIER DESIGN EACH	606 ANCHOR ASSEMBLY, TYPE T EACH	606 BRIDGE TERMINAL ASSEMBLY, TYPE A EACH	203 LINEAR GRADING LIN. FT.	606 BRIDGE TERMINAL ASSEMBLY, TYPE H EACH	606 BRIDGE TERMINAL ASSEMBLY, TYPE J EACH	404 ASPHALT CONCRETE CU. YDS.	SPEC. HERBICIDES FOR WEED CONTROL SQ. YDS.
G-1	II	649 + 12.5	649 + 77.5	-	-	EB	65.0	25.0					1			1	-	-
G-2	II	660 + 47	676 + 56	665 + 04	676 + 56	WB	1587.5	1125.0				1		1137.5		1	42.2	506
G-3	I	660 + 48	676 + 84	664 + 44	676 + 84	EB	1650.0	1205.0		1			1	1238.0			45.9	557
G-5	II	675 + 25	676 + 75	675 + 50	676 + 75	EB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-6	I	681 + 95	683 + 45	681 + 95	683 + 45	WB	150.0	125.0		1			1	150.0			6.0	72
G-7		682 + 02	683 + 52	682 + 02	683 + 27	WB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-8		-	-	683 + 30	684 + 30	EB	-	75.0		1			1	100.0			4.2	50
G-9		-	-	683 + 30	684 + 30	EB	-	75.0		1			1	100.0			4.2	50
G-10		685 + 55	685 + 80	-	-	EB	50.0	-						-			-	-
G-11		22+90(SR283)	23+15(SR283)	-	-	R	50.0	-						-			-	-
G-12		12+81(RAMP F)	698 + 63	12+81(RAMP F)	698 + 63	EB	1575.0	1550.0		1			1	1575.0			58.4	701
G-13		13+66.5RAMP D	697 + 71	19+32.5RAMP D	23+18.5RAMP D	WB	1400.0	362.5				1		375.0		1	14.0	168
G-14		-	-	23+58.5RAMP D	697 + 71	WB	-	412.5					1	412.5		1	15.3	183
G-15		691 + 69	691 + 94	-	-	WB	50.0	-						-			-	-
G-16		-	-	693 + 60	694 + 60	WB	-	75.0		1			1	100.0			4.2	50
G-17		696 + 73	698 + 23	696 + 98	698 + 23	EB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-18		699 + 54	713 + 63	699 + 54	713 + 63	WB	1425.0	1425.0					1	1425.0		1	52.8	633
G-19		699 + 92	701 + 42	699 + 92	701 + 17	WB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-20		700 + 50	713 + 67	700 + 50	713 + 67	EB	1312.5	1312.5					1	1312.5		1	48.6	583
G-21		712 + 17	713 + 67	712 + 42	713 + 67	EB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-22		715 + 17	717 + 56	715 + 17	717 + 56	WB	250.0	250.0					1	250.0		1	9.3	111
G-23		715 + 17	717 + 60	715 + 17	717 + 60	WB	250.0	250.0					1	250.0		1	9.3	111
G-24		715 + 17	717 + 65	715 + 17	717 + 65	EB	250.0	250.0					1	250.0		1	9.3	111
G-25		715 + 17	717 + 68	715 + 17	717 + 68	EB	250.0	250.0					1	250.0		1	9.3	111
G-26		719 + 13	732 + 61	719 + 13	725 + 00	WB	1362.5	562.5		1			1	587.5			22.2	267
G-27		719 + 19	720 + 69	719 + 19	720 + 44	WB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-28		719 + 36	726 + 60	719 + 36	726 + 10	EB	712.5	650.0				1		662.5		1	24.6	296
G-29		739 + 87	742 + 12	739 + 58	741 + 58	EB	225.0	125.0	37.5		1	1		200.0			7.6	92
G-30		740 + 26	741 + 75	740 + 05	742 + 05	WB	150.0	162.5		1		1		200.0			8.0	96
G-31		740 + 30	741 + 82	740 + 06	742 + 06	EB	150.0	162.5		1		1		200.0			8.0	96
G-32		739 + 87	742 + 12	740 + 48	742 + 48	WB	225.0	125.0	37.5		1	1		200.0			7.6	92
G-33		745 + 48	746 + 48	-	-	WB	100.0	-						-			-	-
G-34		763 + 05	763 + 80	-	-	EB	75.0	-						-			-	-
G-35		769 + 80	772 + 17	769 + 07	772 + 07	EB	237.5	275.0		1			1	300.0			11.6	139
G-36		769 + 32	771 + 82	769 + 22	771 + 72	WB	250.0	237.5				1		250.0		1	9.4	112
G-37		770 + 58	772 + 07	770 + 73	771 + 97	EB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-38	II	774 + 50	776 + 00	774 + 60	776 + 97.5	WB	150.0	212.5		1			1	237.5			9.3	111
G-39		774 + 63	776 + 14	774 + 73	775 + 98	WB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-40		774 + 87.5	783 + 70	774 + 97.5	783 + 92.5	EB	887.5	887.5				1		900.0		1	33.4	401
G-41		779 + 37.5	781 + 00	-	-	WB	162.5	-						-			-	-
G-42		783 + 04	783 + 79	782 + 16.5	784 + 04	EB	75.0	112.5	37.5		1	1		187.5			7.2	86
G-43		783 + 43	784 + 18	783 + 18	785 + 05.5	WB	75.0	112.5	37.5		1	1		187.5			7.2	86
G-44		783 + 60	784 + 60	783 + 32	785 + 22.5	WB	100.0	150.0		1		1		187.5			7.5	90
G-45		799 + 27	800 + 02	-	-	EB	75.0	-						-			-	-
G-46		807 + 85	808 + 60	807 + 10	808 + 85	EB	75.0	75.0	37.5		1	1		150.0			5.8	69
G-47		808 + 03	809 + 03	807 + 38	808 + 63	EB	100.0	100.0		1			1	125.0			5.1	61
G-48		808 + 32	809 + 07	808 + 07	809 + 82	WB	75.0	75.0	37.5		1	1		150.0			5.8	69
G-49		807 + 86	808 + 86	808 + 26	809 + 51	WB	100.0	100.0		1			1	125.0			5.1	61
G-50		812 + 97	813 + 20	812 + 87	813 + 10	EB	125.0	100.0		1			1	125.0			5.1	61
G-51		812 + 55	814 + 03	812 + 70	813 + 93	EB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-52		812 + 53	813 + 78	813 + 18	813 + 68	WB	125.0	37.5				1		50.0		1	2.0	24
G-53		814 + 02	815 + 50	814 + 12	815 + 60	WB	150.0	125.0		1			1	150.0			6.0	72
G-54		814 + 19	815 + 67	814 + 29	815 + 52	WB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-55		-	-	814 + 40	815 + 40	EB	-	100.0					1	100.0		1	3.7	44
G-56		814 + 47	815 + 95	814 + 57	815 + 44.5	EB	150.0	87.5					1	87.5		1	3.2	39
G-57		817 + 06	817 + 31	-	-	EB	50.0	-						-			-	-
G-58		18+75RAMP H	21+25 RAMP H	18+50RAMP H	21+00RAMP H	EB	250.0	212.5		1		1		250.0			9.9	118
G-59		821 + 91	822 + 91	821 + 35	823 + 10	EB	100.0	100.0	37.5		1	1		175.0			6.7	80
G-60		822 + 24	823 + 36	821 + 70	823 + 57.5	EB	112.5	150.0		1		1		187.5			7.5	90
G-61	II	822 + 07	823 + 19	822 + 62	824 + 37	WB	112.5	150.0		1			1	175.0			7.0	84
G-62		822 + 50	823 + 50	822 + 30	823 + 92.5	WB	100.0	87.5	37.5		1	1		162.0			6.7	80
G-63		11+74(RAMP G)	13+00(RAMPG)	11+44(RAMPG)	13+44(RAMPG)	WB	125.0	162.5		1		1		200.0			8.0	96
G-64		-	-	12+61(RAMPG)	13+67(RAMPG)	WB	-	112.5		1			1	137.5			5.2	62
G-65		32+20(SR535)	33+33(SR535)	32+08(SR535)	33+33(SR535)	R	112.5	100.0		1				125.0	1		4.7	57
G-66		32+35(SR535)	33+60(SR535)	32+35(SR535)	33+60(SR535)	L	125.0	100.0		1				125.0	1		4.7	57
G-67		36+78(SR535)	20+66(SR535)	36+78(SR535)	20+44(SR535)	R	100.0	100.0		1				125.0	1		4.7	57
G-68		36+99(SR535)	38+24(SR535)	36+99(SR535)	38+24(SR535)	L	125.0	100.0		1				125.0	1		4.7	57
G-69		19+75(RAMP G)	20+25(RAMPG)	-	-	L	50.0	-						-			-	-
G-70		839 + 55	851 + 55	840 + 07.5	851 + 45	WB	1200.0	1125.0				1		1137.5		1	42.2	507
G-71		840 + 52	850 + 52	840 + 54.5	850 + 42	EB	1000.0	962.5		1			1	987.5			37.1	445
G-72		849 + 42	850 + 90	849 + 55	850 + 80	EB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-73		852 + 19	861 + 95	852 + 79	860 + 91.5	EB	975.0	800.0				1		812.5		1	30.2	362
G-74		852 + 82	854 + 30	852 + 92	854 + 15	WB	150.0	75.0	25.0		1		1	125.0			5.1	61
G-75		853 + 22	869 + 05	853 + 32	868 + 94.5	WB	1600.0	1537.5		1			1	1562.5			58.4	700
G-76		870 + 30	871 + 05	-	-	EB	75.0	-						-			-	-
G-77		880 + 36	891 + 61	880 + 36	112+04.5(US20)	WB	1125.0	1425.0		1		1		1462.5			54.8	657
G-78		882 + 20	883 + 55	881 + 42.5	883 + 80	EB	137.5	200.0		1		1		237.5			9.4	113
G-79		882 + 98	884 + 37	881 + 89	884 + 64	EB	137.5	237.5		1		1		275.0			10.8	129
G-80		886+55.5	886 + 93	-	-	WB	75.0	-						-			-	-
G-81		-	-	105+36(US20)	107+86(US20)	EB	-	100.0		2				150.0			5.8	69
G-82		-	-	889 + 30	890 + 80	EB	-	100.0		2				150.0			5.8	69
G-83		102+15(US20)	105+78(US20)	102+15(US20)	103+02.5US20	EB	300.0	-		1				-			-	-
		ELM STREET																
G-84	I	27 + 48	28 + 23	27 + 48	28 + 48	R	75.0	75.0		1				100.0	1		3.8	46
G-85		27 + 95	28 + 45	27 + 70	28 + 45	L	50.0	50.0		1				75.0			2.9	35
G-86		31 + 39	31 + 89	31 + 14	32 + 14	R	50.0	75.0		1				100.0	1		3.8	46
G-87		31 + 64	32 + 39	31 + 64	32 + 39	L	75.0	50.0		1				75.0			2.9	35

TOTALS:		202 GUARDRAIL REMOVED LIN. FT.	606 GUARDRAIL, TYPE 5 LIN. FT.	606 BARRIER GUARDRAIL TYPE 5 LIN. FT.	606 ANCHOR ASSEMBLY, TYPE A EACH	606 ANCHOR ASSEMBLY, TYPE A BARRIER DESIGN EACH	606 ANCHOR ASSEMBLY, TYPE T EACH	606 BRIDGE TERMINAL ASSEMBLY, TYPE A EACH	203 LINEAR GRADING LIN. FT.	606 BRIDGE TERMINAL ASSEMBLY, TYPE H EACH	606 BRIDGE TERMINAL ASSEMBLY, TYPE J EACH	404 ASPHALT CONCRETE CU. YDS.	SPEC. HERBICIDES FOR WEED CONTROL SQ. YDS.
	I - CITY OF PAINESVILLE	13300.0	10,617.5	225	14	8	7	21	11,488	2	10	433.8	5209.0
	II - PAINESVILLE TOWNSHIP	12965.0	11737.5	375	25	12	18	18	13,212	4	8	503.5	6035.0
	I - CITY OF PAINESVILLE								11,488 = 115 STA. (I)				
	II - PAINESVILLE TOWNSHIP								13,212 = 132 STA. (II)				

REF. NO.	COST PARTIC. CODE	PROPOSED LOCATION STATION FROM	PROPOSED LOCATION STATION TO	SIDE	622 CONCRETE BARRIER, TYPE B AS PER PLAN LIN. FT.	203 EMBANKMENT AS PER PLAN CU. YDS.	659 SEEDING AND MULCHING SQ. YDS.
B-1	II	649+25	649+65	EB	40		
B-2	I	684+30	684+70	EB(R)	40	4	*
B-3		23+18.5RAMPD	23+58.5RAMPD	WB	40	15	*
B-4		693+20	693+60	WB	40	7	44
B-5	II	815+40	815+80	EB(L)	40	4	22
B-6		815+44.5	815+84.5	EB(R)	40	7	44
B-7		852+19	852+79	EB	60	15	89
TOTALS:		I-CITY OF PAINESVILLE			120	26	44
		II-PAINESVILLE TOWNSHIP			180	26	155

NOTE: EMBANKMENT QUANTITIES TO BACKFILL BEHIND PROPOSED CONCRETE BARRIER AS SHOWN ON OVERHEAD SIGN ELEVATION VIEWS (SHEETS 98-100)

* SEE SHEET 21 FOR QUANTITIES