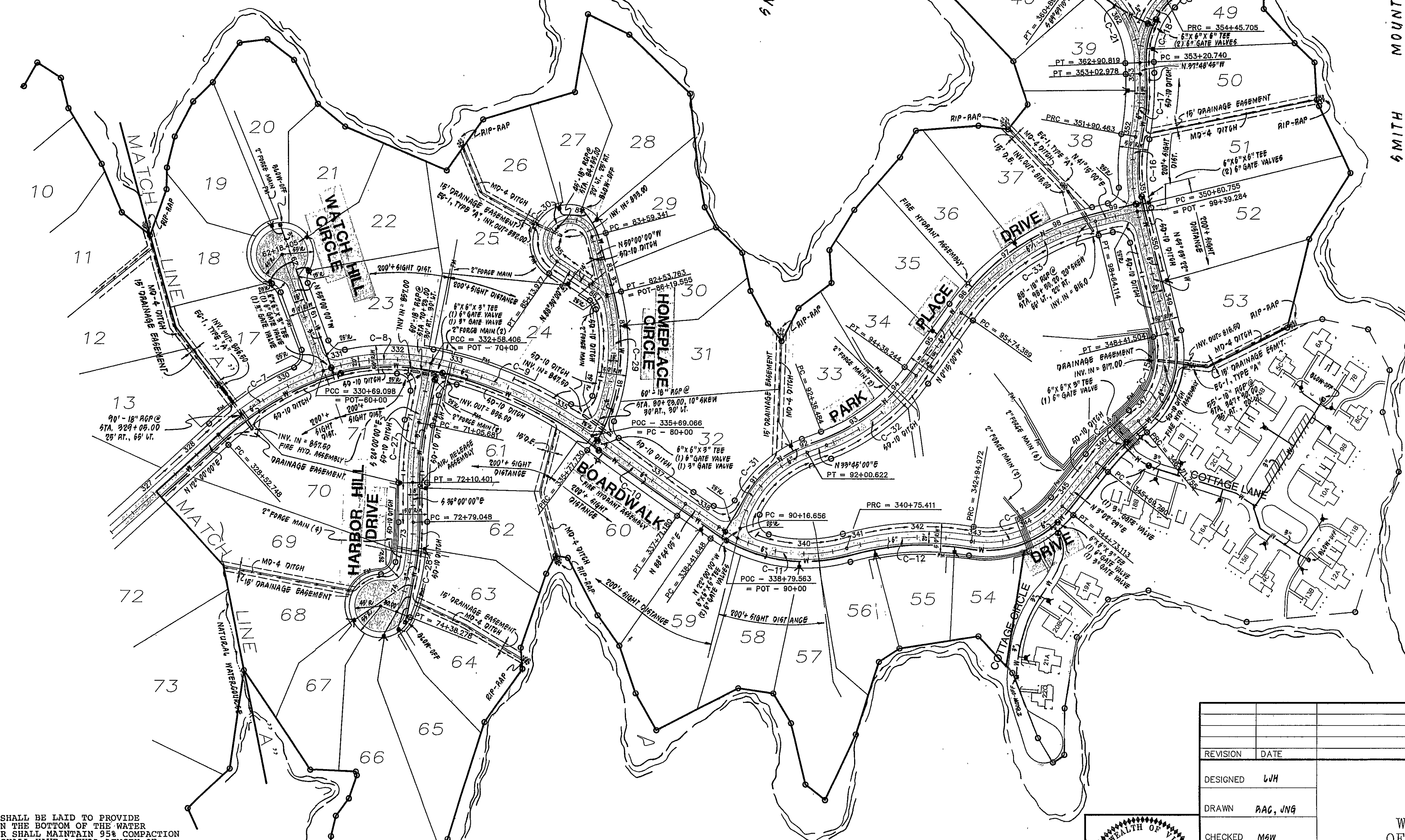


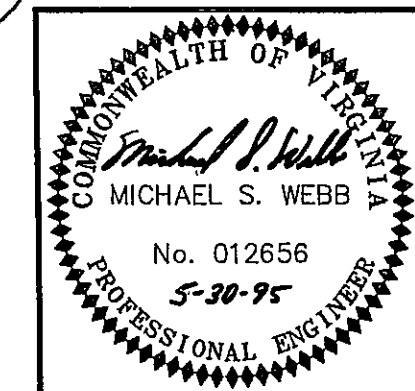
CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C-7	538.69	216.35	109.65	214.90	N 59°12'29" E	23°00'41"
C-8	350.00	189.31	97.03	187.01	N 50°30'18" E	30°59'24"
C-9	717.28	319.32	162.35	316.89	N 78°45'13" E	28°30'27"
C-10	4251.19	193.45	96.74	193.43	S 89°47'46" E	02°36'26"
C-11	266.43	233.76	125.01	226.34	N 63°45'58" E	50°16'13"
C-12	500.00	219.56	111.58	217.80	N 51°12'39" E	25°09'36"
C-13	168.01	178.14	98.47	169.91	N 33°24'58" E	60°44'58"
C-14	481.81	101.97	51.17	101.77	N 09°06'15" E	12°07'32"
C-15	151.44	169.75	95.04	161.00	N 16°56'41" W	64°13'23"
C-16	310.00	129.71	65.82	128.76	N 37°04'35" W	23°58'24"
C-17	500.00	112.52	56.50	112.28	N 31°32'11" W	12°53'36"
C-18	155.30	124.96	66.09	121.62	N 14°46'02" W	46°06'13"
C-19	109.63	67.51	34.86	66.45	N 09°21'28" W	35°17'05"
C-20	120.00	509.01	195.69	204.60	S 31°29'20" W	243°02'04"
C-21	178.32	162.51	87.39	156.94	S 63°54'58" E	52°13'02"
C-27	500.00	104.72	52.55	104.53	S 30°00'00" E	12°00'00"
C-28	420.00	159.23	80.58	158.28	S 25°28'44" E	21°43'19"
C-29	350.00	253.76	132.75	248.24	N 29°13'45" W	41°32'29"
C-30	40.00	154.64	105.58	74.81	S 19°15'00" W	221°30'00"
C-31	189.07	183.97	100.00	176.79	N 05°52'30" E	55°45'00"
C-32	340.00	201.76	103.95	198.81	N 16°45'00" E	34°00'00"
C-33	400.00	289.72	151.55	283.43	N 20°30'00" E	41°30'00"



NOTES:

1) FORCE MAINS AND WATER MAINS AND SERVICES SHALL BE LAID TO PROVIDE A SEPARATION OF AT LEAST 18 INCHES BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE SEWER. CONTRACTOR SHALL MAINTAIN 95% COMPACTION OVER TOP OF FORCE MAIN. EACH FORCE MAIN SHALL HAVE A FULL LENGTH OF PIPE CENTERED UNDER THE WATER LINE TO INSURE THAT THE FORCE MAIN JOINTS ARE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER LINE.

2) FORCE MAINS SHALL BE SCHEDULE 40 PVC WITH WELDED SLEEVES (WATERTIGHT) BENDS IN FORCE MAINS SHALL BE BLOCKED WITH CONCRETE TO PREVENT MOVEMENT. FORCE MAINS SHALL BE PRESSURE TESTED TO 50 PSI FOR ONE HOUR WITH NO LEAKAGE PERMITTED. THE END OF FORCE MAINS SHALL BE MARKED WITH A 4-INCH WOODEN POST. FORCE MAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STATE BOARD OF HEALTH SEWERAGE HANDLING AND DISPOSAL REGULATIONS.



REVISION		DATE	DESCRIPTION
DESIGNED	LWH		
DRAWN	BAG, UNQ		
CHECKED	MSW		
			WATER SYSTEM PLAN FOR "THE BOARDWALK" PREPARED FOR WILLARD CONSTRUCTOIN OF ROANOKE VALLEY, INC. GILLS CREEK MAGISTERIAL DISTRICT FRANKLIN COUNTY, VIRGINIA
LUMSDEN ASSOCIATES, P.C. ENGINEERS-SURVEYORS-PLANNERS ROANOKE, VIRGINIA			SCALE: 1" = 100' DATE: 2 JUNE 1995
			COMM: # 89-284 SHEET 4 of 7