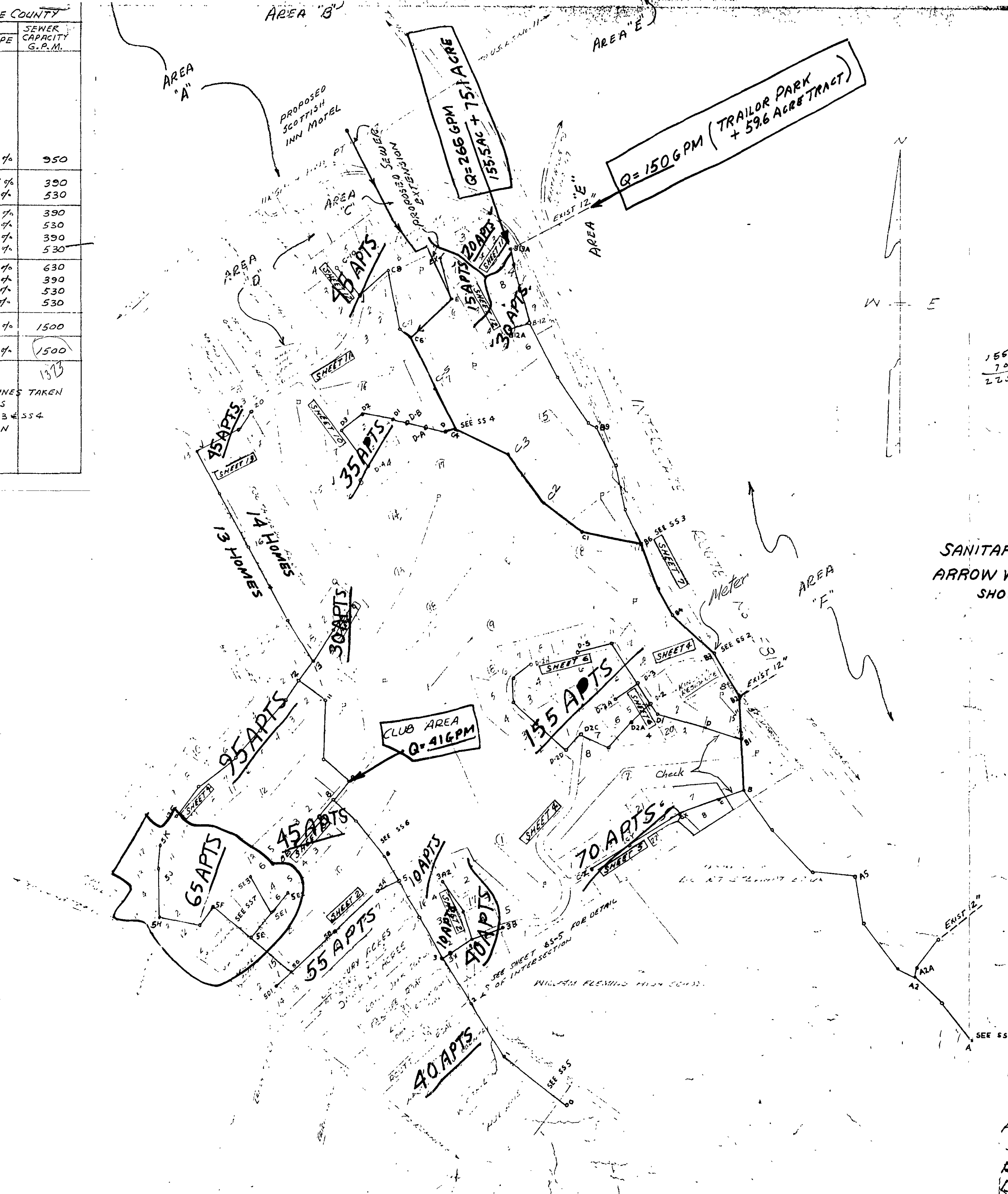


THRU EXISTING SEWER IN ARROW WOOD COUNTRY CLUB, ROANOKE COUNTY		PEAK FLOW G.P.M.		BETWEEN MAN HOLES	SIZE	LINE LENGTH	SLOPE	SEWER CAPACITY G.P.M.
AREAS & UNITS ADDED		PRESENT	ULTIMATE					
A' WEST OF HWY. I-581, NORTH OF HWY 117 140 AC. X 8 X 400 ÷ 1440 =			311					
B' EAST OF HWY I-581, NORTH OF HWY 117 62 AC. X 8 X 400 ÷ 1440 =			138					
HOLIDAY INN & ECONO-TRAVEL MOTELS PROPOSED SCOTTISH INN MOTEL		82	82					
C' SOUTH OF S.W. RAMP, HWY. I-581 7.5 AC. X 10 X 400 ÷ 1440 =			21					
ARROW WOOD - 15 APARTS, X 1600 ÷ 1440		17	17					
TO M.H. C-6		99	669	E-C6	8"	382'	3.5%	950
ARROW WOOD - 45 APARTS, X 1600 ÷ 1440		50	50					
TO M.H. C-4		149	719	C6-C5	8"	373'	0.5%	390
D' SOUTH OF HWY 117 - PROBABLY DARIN TO MHC4 16 AC. X 10 X 400 ÷ 1440 =			44	C5-C4	8"	297'	1.0%	530
ARROW WOOD - 35 APARTS, X 1600 ÷ 1440		39	39	C4-C3	8"	395'	0.5%	390
TO M.H. B-6		188	802	C3-C2	8"	399'	1.0%	530
E' EAST OF HWY. I-581 - INCLUDES SMITH TRACT 64 AC. X 7 X 600 ÷ 1440 =		67	187	C2-C1	8"	313'	0.5%	390
MOBILE HOME PARK		83	83	C1-B6	8"	397'	1.0%	530
ARROW WOOD - 50 APARTS, X 1600 ÷ 1440		55	55	B6-B5	8"	316'	1.5%	630
TO M.H. B-2		393	1127	B5-B4	8"	200'	0.5%	390
F' EAST OF HWY I-581 68 AC. X 7 X 600 ÷ 1440 =			199	B4-B3	8"	399'	1.0%	530
TO M.H. B-1		393	1326	B3-B2	8"	355'	1.0%	530
ARROW WOOD - 155 APARTS, X 1600 ÷ 1440		172	172	B2-B1	15"	264'	0.3%	1500
TO M.H. B		565	1498	B1-B	15"	352'	0.3%	1500
PREPARED BY DAVID DICK ENGR. MAR. 17, 1973								1313
ESTIMATE OF SEWAGE QUANTITIES ARROW WOOD PROPERTY BASED ON INFO. ON MAP SHOWING SANITARY SEWER CAPACITIES BY C.B. MALCOLM & SON, OCT. 17, 1968								
				NOTE: DATA ON SEWER LINES TAKEN FROM PLANS & PROFILES SHEETS SS1, SS2, SS3 & SS4 BY C.B. MALCOLM & SON JULY 15, 1966				

SANITARY SEWER FLOW COMPS.
FOR SEWER THRU ARROW WOOD
COUNTRY CLUB INC. PROPERTY

M.H. TO M.H.	EXISTING FLOW	EXISTING CAPACITY	EXISTING CAPACITY	EXISTING CAPACITY	EXISTING CAPACITY	EXISTING CAPACITY
B-51	2.60	2.08	2.24	1.99	2.60 M.G.D.	
B1-B2	2.60	2.08	2.34	1.74	2.60 M.G.D.	
B2-B3	0.57 M.G.D.	0.78	0.62	0.70	1.97 M.G.D.	
B3-B4	0.57 M.G.D.	0.78	0.62	0.70	2.07 M.G.D.	
B4-B5	0.57 M.G.D.	0.96	0.45	0.50	1.56 M.G.D.	
B5-B6	0.57 M.G.D.	0.96	0.77	0.86	2.08 M.G.D.	
B6-C1	0.46 M.G.D.	0.78	0.62	0.70	1.34 M.G.D.	
C1-C2	0.46 M.G.D.	0.56	0.45	0.50	1.12 M.G.D.	
C2-C3	0.46 M.G.D.	0.78	0.62	0.70	1.60 M.G.D.	
C3-C4	0.46 M.G.D.	0.50	0.45	0.50	1.12 M.G.D.	
C4-C5	0.45 M.G.D.	0.78	0.62	0.70	1.61 M.G.D.	
C5-C6	0.45 M.G.D.	0.56	0.45	0.50	1.12 M.G.D.	
C6-C7	0.44 M.G.D.	0.56	0.45	0.50	2.21 M.G.D.	

M.H. TO M.H.	ULTIMATE FLOW	PIPE SIZE	SLOPE	CAPACITY
12-13	1.07	10"	17.19%	
13-14	1.07	10"	0.60%	1.1 MGD
14-15	1.07	10"	0.60%	1.1 MGD
15-16	1.07	8"	0.60%	1.1 MGD
16-17	1.07	8"	5.75%	1.89 MGD
17-18	0.85	8"	1.5%	0.85 MGD



APTS	HOUSES	CLUB
155	30	20
70	75	15
225	65	30
	45	45
	55	35
	40	45
	10	35
	10	35
	40	35
	390	225

SANITARY SEWER CAPACITIES
AT
ARROW WOOD COUNTRY CLUB INC.
SHOWING POPULATION & FLOWS
ADDED HEREON
OCT. 17, 1968
C.B.M. COMM. NO 19357

INDEX SHEET
PLANS AND PROFILES
OF
PROPOSED SANITARY SEWERS
IN PROPERTY OF
ARROW WOOD COUNTRY CLUB
BY: C.B. MALCOLM & SON
STATE CERT. ENGR.
ROANOKE COUNTY, VA
DATE: JULY 15, 1966 SCALE: 1"=40'