



DRAINAGE NOTES:

1. THE GRADE FOR ALL ROAD CULVERTS SHALL BE:
 24" RCP: 0.68% 24" CMP: 2.35% 24" CPP: 0.40%
 30" RCP: 0.50% 30" CMP: 1.75% 30" CPP: 0.30%
 36" RCP: 0.40% 36" CMP: 1.35% 36" CPP: 0.23%
 48" RCP: 0.25% 48" CMP: 0.93% 48" CPP: 0.15%
2. ALL ROAD CULVERTS SHALL CONFORM TO WALLER COUNTY STANDARDS AND MUST BE A MINIMUM OF 16' IN LENGTH.
3. ALL LOTS ARE TO HAVE INDIVIDUAL SYSTEMS THAT MEET THE STATE OF TEXAS AND MONTGOMERY COUNTY STANDARDS.
4. THIS GENERAL DRAINAGE PLAN IS BASED UPON U.S.G.S. QUAD MAPS AND INITIAL FIELD INSPECTIONS. THE DEVELOPER AND THE ENGINEER RESERVE THE RIGHT TO MAKE MINOR CHANGES AND ADJUSTMENTS TO THE LOCATIONS OF DRAINAGE STRUCTURES TO BETTER CONFORM TO THE EXISTING NATURAL TOPOGRAPHY.
5. THERE IS A 10' UTILITY EASEMENT ALONG BOTH SIDES OF ALL PROPOSED STREETS AS PER THE PLAN.
6. THERE IS A 16' UTILITY EASEMENT LYING 8' ALONG BOTH SIDES OF ALL REAR AND SIDE LOT LINES AS PER THE PLAN.
7. THERE ENGINEER WILL PROVIDE AS-BUILT SURVEYS OF EACH DETENTION POND TO THE COUNTY FOR REVIEW ONCE THEY ARE COMPLETED.

CULVERT CALCULATIONS:

PIPE LOCATION	DRAINAGE AREA (Ac.)	T(c) (min.)	25yr Q (cfs)	PIPE(S)
A1	3.351	10	11.65	1-24" RCP
A2	14.844	16	43.11	2-24" RCPs
A3	7.858	12	25.59	3-24" RCPs
A4	42.713	26	105.24	2-48" RCPs
A5	17.832	18	50.21	3-36" RCPs
A7	45.619	32	104.38	2-48" RCPs
A8	9.948	13	31.08	2-24" RCPs
A9	7.769	11	25.98	2-24" RCPs
A10	0.943	10	3.28	2-24" RCPs
B1	7.742	11	25.89	2-24" RCPs
B2	11.681	14	35.98	2-24" RCPs
B3	11.642	14	35.86	2-24" RCPs
B4	28.598	17	81.22	2-36" RCPs
B5	2.051	10	7.13	1-24" RCP
B6	30.418	20	82.98	2-48" RCPs
B7	3.555	20	9.70	2-24" RCPs
C2	7.766	12	25.29	2-24" RCPs
D1	1.500	10	5.21	1-24" RCP
E1	1.034	10	3.59	1-24" RCP
F3	6.023	12	19.61	2-24" RCPs
F4	2.767	10	9.62	1-24" RCP
G1	0.484	10	1.68	1-24" RCP
G2	6.602	10	22.95	2-24" RCPs
H1	3.789	13	11.84	2-24" RCPs
J1	0.340	10	1.18	1-24" RCP

DETENTION POND SUMMARY:

POND	DETENTION POND BASE	100yr POND ELEVATION	DEPTH	TOP OF BERM	CREST OF OVERFLOW	PIPE(S)
A	210.00	213.51	3.51	214.9	213.5	1-24" RCP
B	240.00	243.11	3.11	249.3	248.3	1-36" CPP
C	245.00	250.68	5.68	251.7	250.7	2-36" CPPs
D	235.00	242.58	7.58	243.6	242.6	2-36" CPPs

SCALE: 1"=300'
 NOVEMBER 1998
 REVISED: JANUARY 1999
DRAINAGE PLAN
CROWN OAKS
SECTION ONE
 466.995 Acres
 MONTGOMERY COUNTY, TEXAS
 MONTGOMERY COUNTY ENGINEER

 COUNTY ENGINEER: MARK J. MOONEY, P.E.
 DATE APPROVED: 11/2/99

RECORD DWG. 10/7/99

