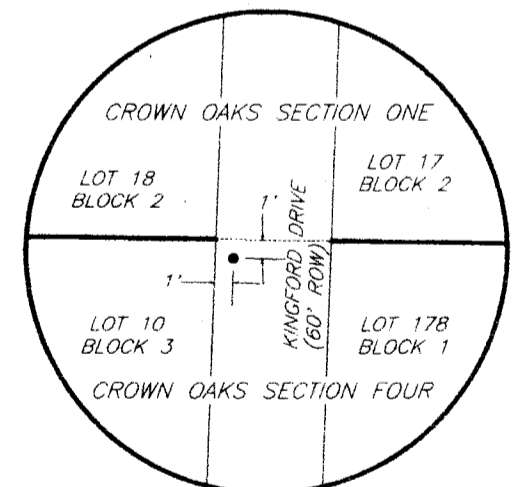
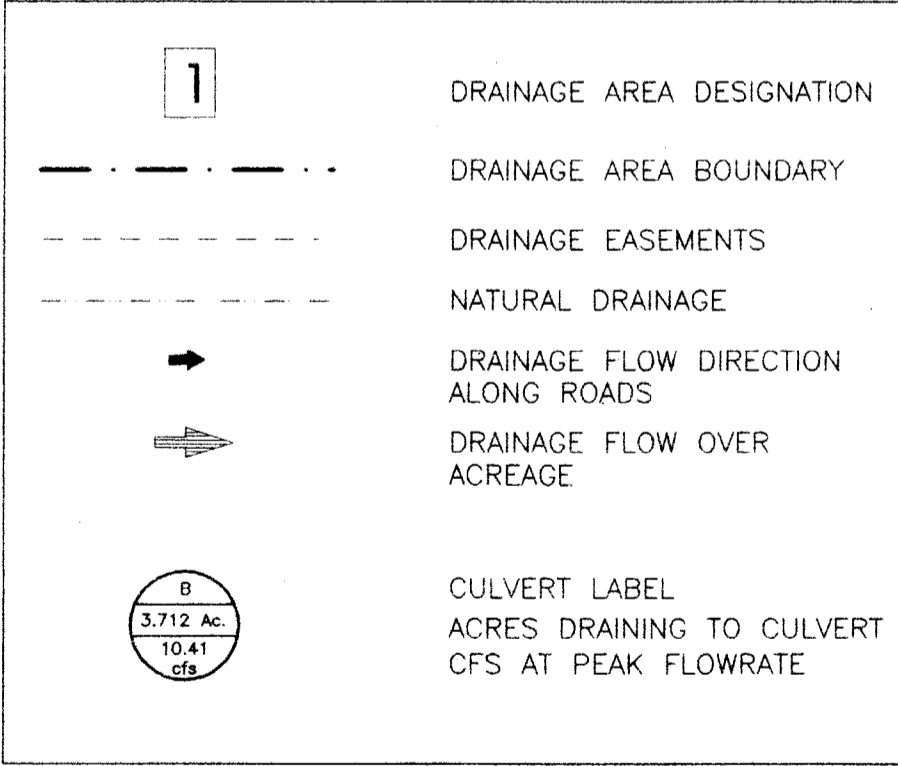
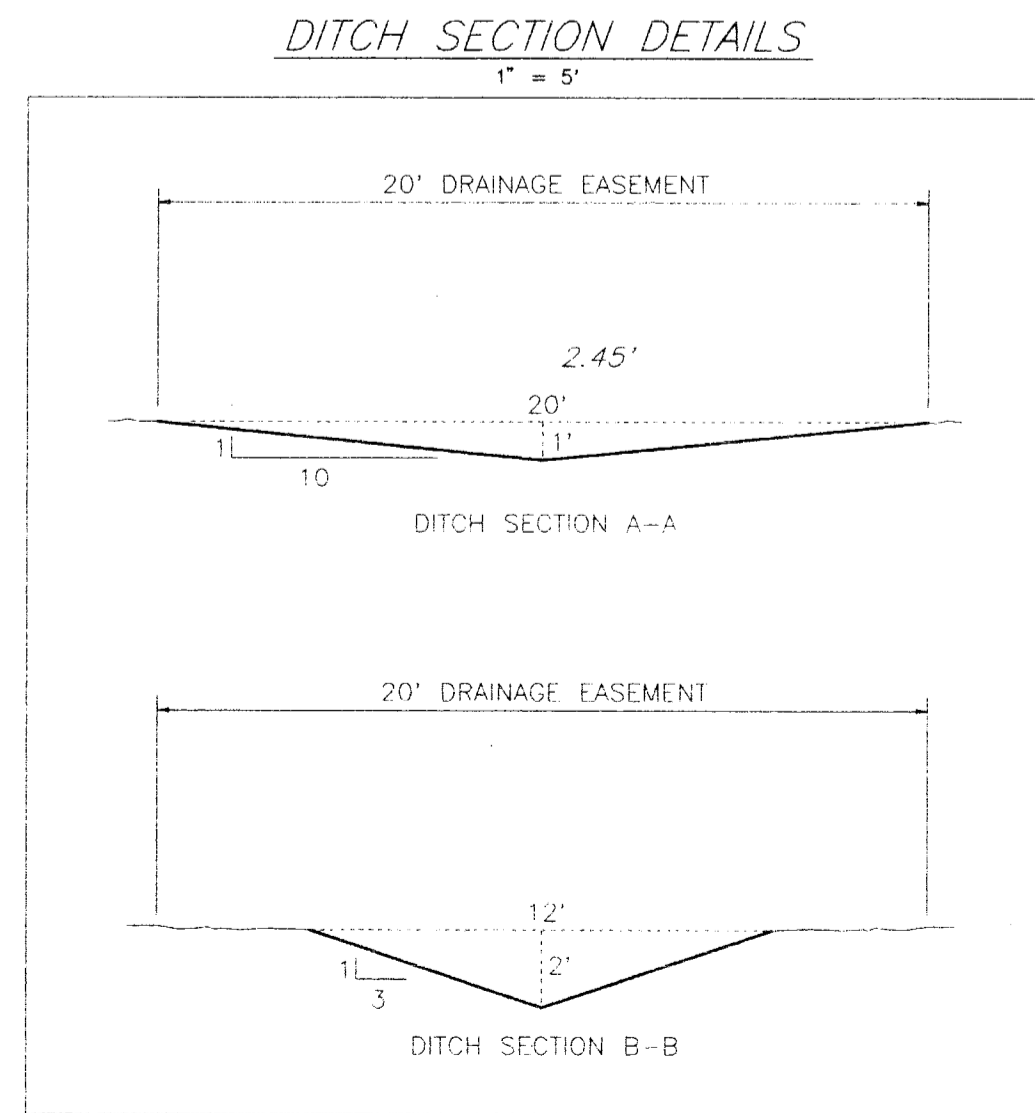


Pipe Label	Basin Area (Acres)	Runoff Coeff.	Time of Concn. (Minutes)	Adjusted Rainfall (in/hr)	Peak Flowrate (cfs)	Culvert Qty. & Size [(#) diam.]
A	0.792	0.449	13	7.8	2.78	(1) 18"
B	3.712	0.425	21	6.6	10.41	(1) 24"
C	17.552	0.297	24	6.4	33.26	(1) 36"
D	17.304	1.272	15	7.5	35.15	(1) 36"
E	0.485	0.850	10	8.7	3.58	(1) 18"
F	113.529	Based on DS-1 HEC-1 run			311.74	(4) 60"
H	67.278	From runoff rate curve			145.12	(3) 48"
J	4.287	0.316	15	7.5	10.13	(1) 24"
K	17.674	0.315	18	7.0	39.19	(3) 24"
L	36.278	0.311	33	5.6	63.29	(2) 36"
M	4.537	0.386	21	6.6	11.56	(1) 24"
N	27.795	0.335	36	5.3	49.16	(2) 36"
P	76.709	From runoff rate curve			139.55	(4) 36"
R	34.902	0.296	42	5.0	51.14	(2) 36"



- DRAINAGE NOTES:**
- THERE IS A 16' UTILITY AND DRAINAGE EASEMENT DEDICATED BY THE PLAT OF CROWN OAKS SECTION FOUR ALONG BOTH SIDES OF THE RIGHT-OF-WAY WITHIN THE SUBDIVISION.
 - ALL RIGHT-OF-WAYS ARE PRIVATE ROADS AND HAVE A 60' R.O.W. WIDTH UNLESS SHOWN OTHERWISE.
 - THIS GENERAL DRAINAGE PLAN IS BASED UPON U.S.G.S. QUADRANGLE MAPS AND INITIAL FIELD INSPECTIONS. THE ENGINEER AND THE DEVELOPER RESERVE THE RIGHT TO MAKE MINOR CHANGES AND ADJUSTMENTS TO THE LOCATIONS OF DRAINAGE STRUCTURES TO BETTER CONFORM TO THE NATURAL TOPOGRAPHY.
 - ALL ROAD CULVERTS SHALL CONFORM TO MONTGOMERY COUNTY STANDARDS AND MAY BE EITHER REINFORCED CONCRETE OR CORRUGATED PLASTIC PIPE.
 - MAXIMUM GRADE OF ROADWAY CULVERTS: (BASED ON 5 FT./SEC. VELOCITY FOR ROADSIDE DITCH DRAINAGE)

CORRUGATED PLASTIC	REINFORCED CONCRETE
18" CPP 0.416%	18" RCP 0.704%
24" CPP 0.248%	24" RCP 0.480%
30" CPP 0.211%	30" RCP 0.356%
36" CPP 0.165%	36" RCP 0.279%
42" CPP 0.135%	42" RCP 0.227%
48" CPP 0.113%	48" RCP 0.190%
54" CPP 0.096%	54" RCP 0.163%
60" CPP 0.084%	60" RCP 0.141%
 - GRASS SEED ALL EMBANKMENT SIDE SLOPES AND DISTURBED AREAS WITH BERMUDA SEED @ 20/AC (HULLED) WITH FERTILIZER 13-13-13 @ 500 LB/AC.
 - ALL DRAINAGE EASEMENTS MUST MEET MINIMUM COUNTY GRADE REQUIREMENTS: 0.10% MIN. GRADE
 - THIS PROPERTY LIES WITHIN ZONE X WITH A SMALL PORTION LYING WITHIN ZONE A (FLOODPLAIN) AS PER FEMA PANEL 48339C0365 F, DATED DECEMBER 19, 1996. THE FEMA MAP INDICATES THAT ONLY LOTS 36 AND 71 OF BLOCK ONE HAVE A SMALL AREA WITHIN THE FLOODPLAIN.



SCALE: 1" = 300'

MONTGOMERY COUNTY ENGINEER
 COUNTY ENGINEER: MARK L. MOONEY, P.E.
 DATE: _____



POWERS ENGINEERING
 3706 W. DAVIS - CONROE, TEXAS 77304

DRAINAGE PLAN - OVERALL LAYOUT
CROWN OAKS SECTION FOUR

P&P-1
 SCALES
 --PLAN VIEW-- AS NOTED
 --PROFILE VIEW--
 HORIZ. 1" = 50'
 VERT. 1" = 5'
 SHEET 1 OF 22