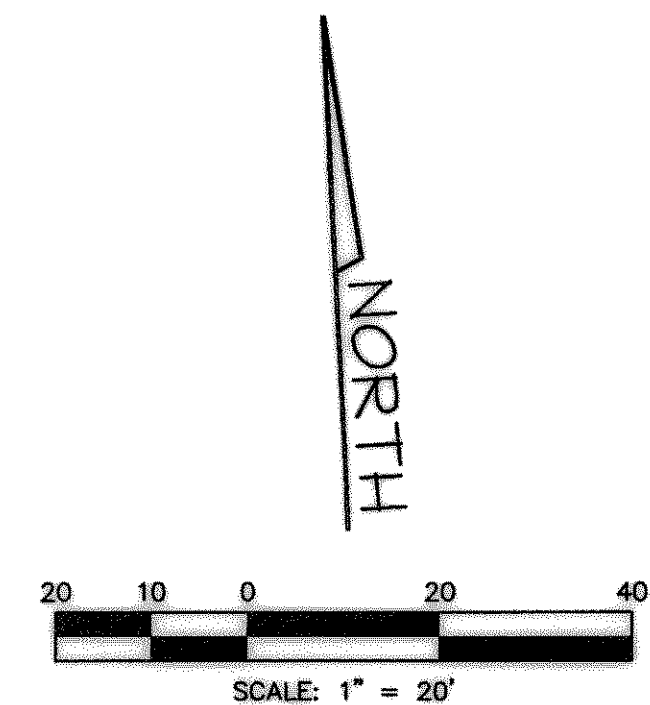
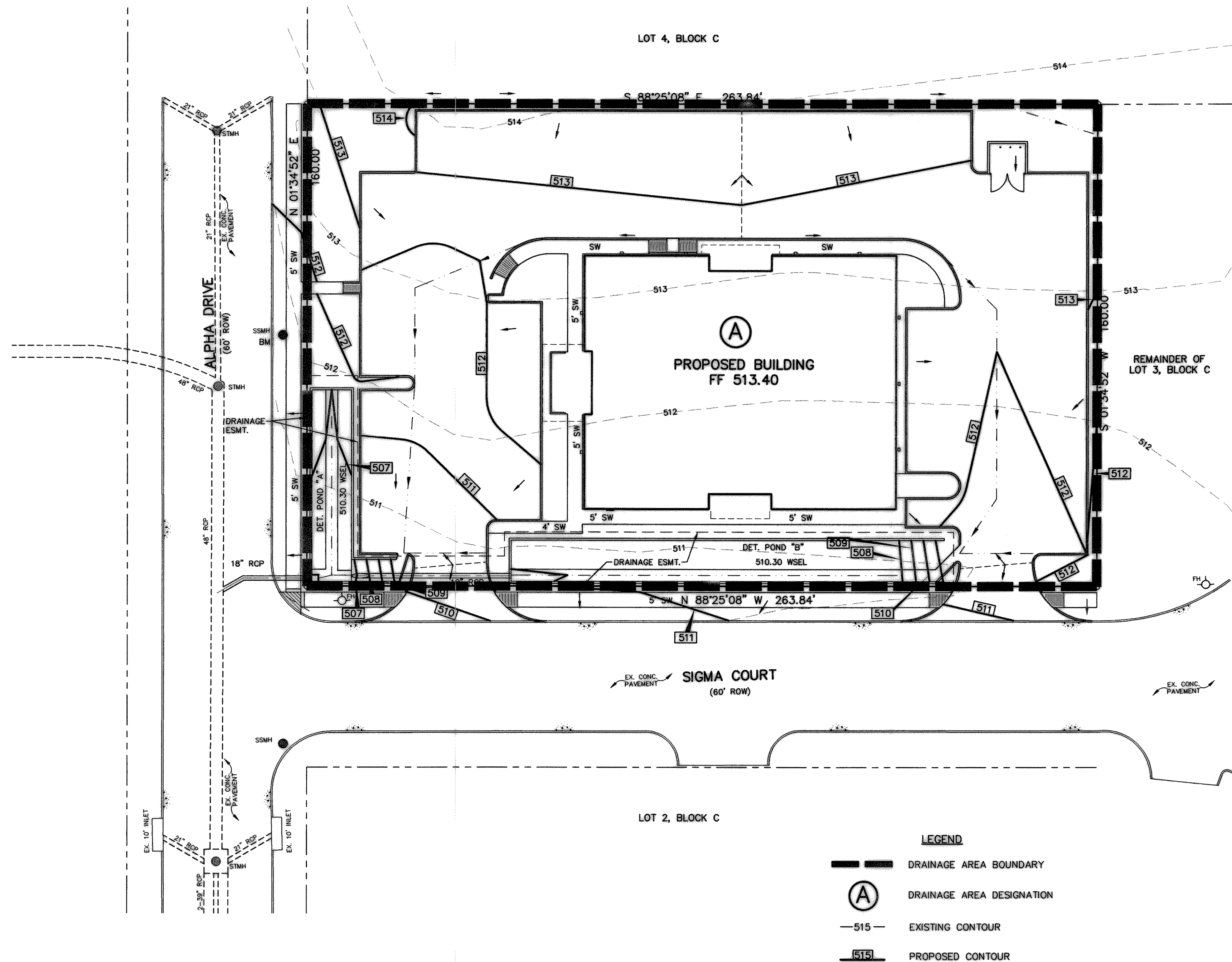




STORM WATER RUNOFF CALCULATIONS					
AREA NO.	ACRES	TC (min)	"c"	"I ₁₀₀ " (IN./HR.)	"Q ₁₀₀ " (cfs)
A	0.97	10	0.9	9.8	8.6
					DISCHARGE TO DETENTION POND

RELEASE RATE CALCULATION				
STORM EVENT	VOLUME REQ.	DEPTH OF POND	ALLOWABLE DISCHARGE	ACTUAL DISCHARGE
10 yr	5,580	2.7'	2.0 cfs	2.0 cfs
25 yr	6,576	3.1'	2.3 cfs	2.2 cfs
50 yr	7,290	3.3'	2.5 cfs	2.5 cfs
100 yr	8,760	3.9'	2.8 cfs	2.8 cfs

DETENTION CALCULATIONS

Allowable Discharge
Area = 0.97 Acres
Cres = 0.35
I100 = 8.3
TC = 20 min
Q(allowable) = 2.8 cfs
Storm Duration calculations CA = (0.9)(0.97) = 0.873
10min = 9.8 Q = 8.56
20min = 8.3 Q = 7.25
30min = 6.9 Q = 6.02
40min = 5.8 Q = 5.06
50min = 5.0 Q = 4.37
60min = 4.5 Q = 3.93
70min = 4.2 Q = 3.67
80min = 3.9 Q = 3.40
90min = 3.5 Q = 3.06

Volume Determination		
10min	10 x 8.56 x 60	= 5,136
	0.5 x 20 x 2.8 x 60	= 1,680
		3,456 c.f.
20min	20 x 7.25 x 60	= 8,700
	0.5 x 30 x 2.8 x 60	= 2,520
		6,180 c.f.
30min	30 x 6.02 x 60	= 10,836
	0.5 x 40 x 2.8 x 60	= 3,360
		7,476 c.f.
40min	40 x 5.06 x 60	= 12,144
	0.5 x 50 x 2.8 x 60	= 4,200
		7,944 c.f.
50min	50 x 4.37 x 60	= 13,110
	0.5 x 60 x 2.8 x 60	= 5,040
		8,070 c.f.
60min	60 x 3.93 x 60	= 14,148
	0.5 x 70 x 2.8 x 60	= 5,880
		8,268 c.f.
70min	70 x 3.67 x 60	= 15,414
	0.5 x 80 x 2.8 x 60	= 6,720
		8,694 c.f.
80min	80 x 3.40 x 60	= 16,320
	0.5 x 90 x 2.8 x 60	= 7,560
		8,760 c.f.
90min	90 x 3.06 x 60	= 16,524
	0.5 x 100 x 2.8 x 60	= 8,400
		8,124 c.f.

* Volume Required: 8,760 cf
Volume Provided:
Pond "A" provides 2,784 cf of storage.
Pond "B" provides 6,045 cf of storage.
Total 8,829 cf
Normal 100 Year Pool Elev. - 510.30

RATING TABLE	
DEPTH (ft)	DISCHARGE (cfs)
0.0	N/A
0.5	0.8
1.0	1.3
1.5	1.6
2.0	1.8
2.5	1.9
3.0	2.2
3.5	2.6

THIS TABLE IS BASED ON DROP INLET OUTLET STRUCTURE (SEE SHEET C3)

RECORD DRAWING

IMPROVEMENTS INDICATED ON THIS PLAN WHERE MADE IN ACCORDANCE WITH THE PROJECT PLANS & SPECIFICATIONS. THE DESIGN ENGINEER IS NOT AWARE OF ANY CHANGES TO THESE PLANS OTHER THAN THOSE PROVIDED ON A CONTRACTOR SET OF MARKUPS.

DATE: JUNE 24, 2008