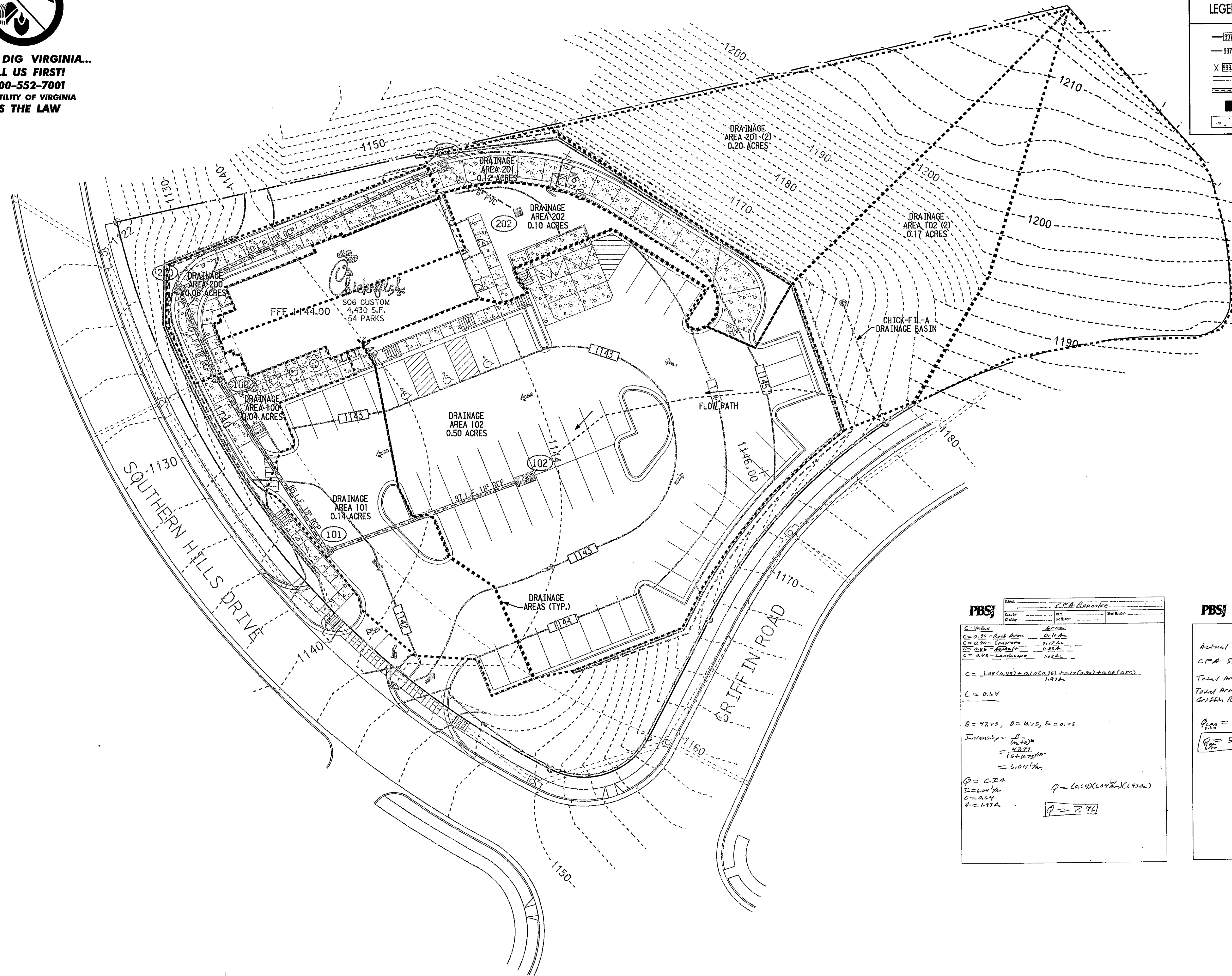
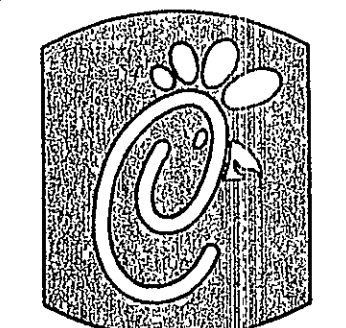




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LEGEND	
	PROPOSED CONTOUR
	EXISTING CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING STORM PIPE
	CHICK-FIL-A PROPOSED STORM PIPE
	CHICK-FIL-A PROPOSED STORM INLET
	CONCRETE



5200 Buffington Rd.
Atlanta, GA. 30349-2998
Contact: Kevin Kilgore
(404) 684-8654

Revisions:

Mark Date By

△

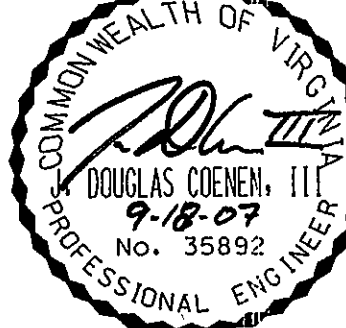
Mark Date By

△

Mark Date By

△

Seal



PBS
5665 New Northside Drive
Suite 400
Atlanta, Georgia 30328
(770) 353-0380
(770) 353-0371 Fax

STORE

CHICK-FIL-A
SOUTHERN
HILLS DRIVE
@ GRIFFIN ROAD
ROANOKE, VA.

SHEET TITLE

POST
DEVELOPED
DRAINAGE
AREA MAP

☐ Preliminary
☐ 80% Submittal
☐ For Construction

Job No.: 061957

Store: 2139

Date: 2-26-07

Drawn By: JDR

Checked By: TMR

Sheet

C-3.1

Subject: CFA Roanoke	
Drawn By: JDR	Check By: TMR
Date: 2-26-07	Sheet Number: 2139

C-Value

C=0.95 - Road Area	0.10 Ac
C=0.90 - Concrete	0.12 Ac
C=0.85 - Asphalt	0.22 Ac
C=0.85 - Concrete	0.22 Ac

$C = \frac{1.08(0.45) + 0.10(0.95) + 0.12(0.90) + 0.22(0.85)}{1.93 \text{ ac}}$

$C = 0.64$

$B = 47.73, D = 12.75, E = 0.75$

Intensity = $\frac{B}{(C+D)^E}$

$= \frac{47.73}{(0.64+12.75)^{0.75}}$

$= 4.02 \text{ in/hr}$

$= 6.04 \text{ in/hr}$

$Q = CIA$

$Q = 6.04 \text{ in/hr}$

$C = 0.64$

$A = 1.93 \text{ ac}$

$Q = 6.04(1.93 \text{ ac})(6.04 \text{ in/hr})$

$Q = 7.46$

Actual Q picked up by storm system on CFA Site:

Total Area to CFA Storm System = 1.33 Ac

Total Area bypassing CFA Storm System to Griffin Road & Southern Hills Road = 0.6 Ac

$Q_{CFA} = (0.64)(6.04 \text{ in/hr})(1.33 \text{ ac})$

$Q_{CFA} = 5.14 \text{ cfs}$

