

SANITARY MH
TOP=659.63
FL=645.98

CHEVINGTON (50' W) COURT

DEVELOPED - WEST
 A=1.45 Ac.
 Tc=13.02 min.
 CN=79
 Q₂=2.30 cfs
 Q₁₀₀=8.64 cfs

D
 RETAIL
 FF 684.00

RETAIL COFFEE
C
 RETAIL RESTAURANT
 FF 684.0

B
 RETAIL
 FF 686.0

A
 FF 684.00
 CVS pharmacy
 TYPE 'A'
 12,900 SF
 97'-0" x 137'-0"
 211 SPACES
 85 SPACES

LAKE
 NORMAL POOL 669.00
 STORAGE 99,100 CF

AREA E
 INDEPENDENT CARE/ASSISTED LIVING
 125 UNITS
 4 STORY
 55' HEIGHT

**SITE PLAN SUBJECT TO
 FUTURE CITY APPROVAL**

L=591.85' R=607.96'
 D=55°46'40"
 CH=S02°44'14"E 568.76'

I=103.75' R=1392.39'
 D=4°16'09"
 CH=N64°21'15"E 103.73'

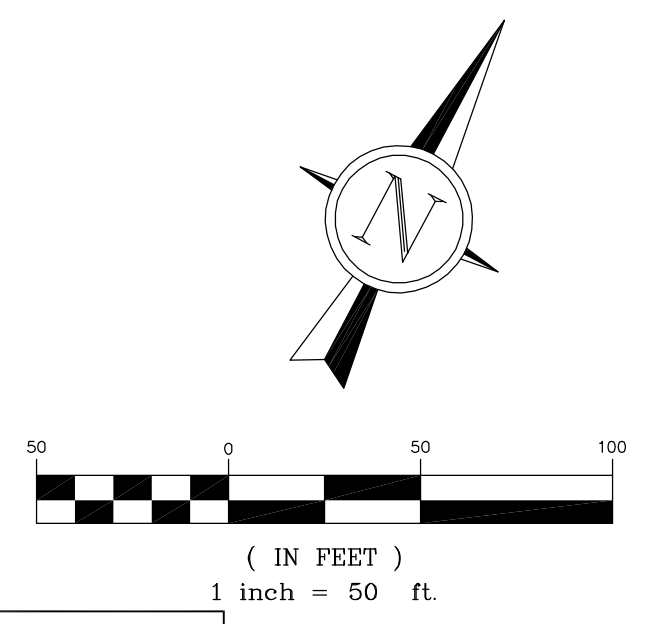
CLAYTON (VARIABLE WIDTH) ROAD
 N31°32'08"W
 7.14'

S62°13'11"W 275.87'

N62°01'52"E
 383.23'

L=260.14' R=187.17'
 CH=S08°09'00"W 284.85'

S17°41'34"W
 38.52'



DEVELOPED - EAST
 A=10.19 Ac.
 Tc=10.00 min.
 CN=93
 Q₂=31.18 cfs
 Q₁₀₀=79.46 cfs

STORMWATER RUNOFF ESTIMATES

PROPOSED RUNOFF - EXISTING RUNOFF
 * 30 MIN OF STORAGE = ESTIMATED STORAGE REQUIRED
 88.61 - 49.39 * 30 MIN * 60 SEC/MIN
 = 70,596 CF
 STORAGE PROVIDED = 99,100 CF
 WATER QUALITY IS PROVIDED IN PRETREATMENT DEVICES
 AND WET POOL OF LAKES
 CHANNEL PROTECTION CALCULATIONS
 STORAGE REQUIRED = 42,668 CF
 STORAGE PROVIDED BETWEEN 669 AND 671.5 = 43,750 CF

CHANNEL PROTECTION VOLUME

Site Area = 10.19	% Impervious = 72
Impervious Area = 7.32	Rv = 0.009(I)+0.05 = 0.70
Penous Area = 2.87	P = 1.14
Tc (Time of Concentration) = 10 min = 0.1667	P (1 year storm) = 2.50 in
Qa (1-yr post developed) = 1.78 in	
Cn Value = 93	
	la = (200/Cn)-2
	la = 0.1505
	la/P = 0.06
1-year post developed peak discharge	
From Figure D-11.1	
qi = 925 csm/in	qi = qiAQa
	qi = 26.21 cfs
If qi less than or equal to 2 no Cpv is required	
Peak Outflow discharge	
From Figure D11.2	
qo/qi (T-24 hrs) = 0.025	qo = qo/qi * qi
	qo = 0.655 cfs
Ratio of storage to Runoff Volume	
Vs/Vr = 0.683 - 1.43(qo/qi) + 1.64(qo/qi) ² - 0.804(qo/qi) ³	
	Vs/Vr = 0.648
Channel Protection Storage Volume	
Vs = (Vs/Vr) * Vr	
Vs = 1.154 in	
Vs = 0.98 Ac*ft	
Vs = 42,668 CF	

PREPARED FOR:
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REV. NO.	REMARKS	DATE
1	PER OWNER COMMENTS	03/17/09
2	PER CITY COMMENTS	04/16/09
3	PER CITY, CEB & OWNER COMMENTS	05-08-09

**SITE DEVELOPMENT PLAN
 CLAYTON &
 HENRY
 SW CORNER OF INTERSECTION**

**PROPOSED
 DRAINAGE AREA
 PLAN**

JOB NUMBER: 2062
 DRAWN BY: JLW
 DATE: 03/20/09
 CHECKED BY: LIM
 DATE: 03/20/09
 SHEET:

C6

1/10/2009 9:25 AM:lan:Whitaker

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