



RIC Dominion Access Road Drainage Area, C-Factor, Time of Concentration Analysis

Area Number	Area (ft ²)	Area (Acres)	C-Factor	Downstream Structure	Structure Type	Time of Concentration (minutes)						Intensity (in/hr)			Area Number	
						Overland Flow Time			Channel Flow Time			Total	2-Year Intensity	10-Year Intensity		100-Year Intensity
						Length	Slope	Result	Height	Length	Result					
Dominion Access Road																
1	12535	0.29	0.85	Ex. 10-5	DI-3B	Not used for Intensity Calculations						4.0			1	
2	33755	0.77	0.45	Ex. Ditch	N/A	111	0.1%	14.0	0.1	474	31.2	45.3	1.9	2.7	3.6	2
3	59585	1.37	0.45	3-9	N/A	Add to Area 2			0.1	166	9.5	54.8	1.7	2.4	3.3	3
4	7736	0.18	0.85	Ex. 10-10	DI-3A	Not used for Intensity Calculations						4.0			4	
5	2601	0.06	0.85	Ex. 10-6	DI-3C	Not used for Intensity Calculations						6.5			5	
6	809	0.02	0.35	Ex. Ditch	N/A	No Overland Flow			0.7	100	2.0	5.0	5.3	7.0	8.9	6
7	1188	0.03	0.35	Ex. Ditch	N/A	Add to Area 6			1.0	100	1.7	6.7	4.9	6.4	8.1	7
8	1575	0.04	0.35	Ex. 10-8	DI-5	Add to Area 7			0.5	50	1.0	7.8	4.7	6.1	7.8	8
9	6237	0.14	0.85	Ex. 10-7	DI-3A	Not used for Intensity Calculations						4.0			9	
10	1653	0.04	0.85	Ex. 10-9	DI-3A	Not used for Intensity Calculations						4.0			10	
11	4982	0.11	0.35	Ex. 10-8	DI-5	Add to Area 14			1.0	100	1.7	6.7	4.9	6.4	8.1	11
12	1525	0.04	0.85	Ex. 10-13	DI-3C	Not used for Intensity Calculations						6.5			12	
13	6411	0.15	0.85	Ex. 10-14	DI-3B	Not used for Intensity Calculations						4.0			13	
14	4992	0.11	0.35	Ex. Ditch	N/A	No Overland Flow			0.7	100	2.0	5.0	5.3	7.0	8.9	14
15	9891	0.23	0.70	Ex. 10-12	DI-3A	Not used for Intensity Calculations						4.0			15	
16	41960	0.96	0.30	3-9	N/A	200	0.99%	16.7	1.3	231	4.1	20.8	3.0	4.1	5.3	16
17	12299	0.28	0.80	3-1	DI-3B	Not used for Intensity Calculations						4.0			17	
18	13928	0.32	0.75	3-2	DI-3B	Not used for Intensity Calculations						4.0			18	
19	4877	0.11	0.85	Ex. 11-1	DI-3A	Not used for Intensity Calculations						4.0			19	
20	4767	0.11	0.85	Ex. 11-2	DI-3A	Not used for Intensity Calculations						4.0			20	
21	37531	0.86	0.30	3-4	DI-7	200	0.94%	16.8	0.5	67	1.5	18.3	3.2	4.3	5.6	21
22	277095	6.36	0.55	EX-1	MH-1	200	1.17%	8.8	3.9	445	5.6	14.4	3.6	4.8	6.2	22
23	4749	0.11	0.70	3-3	DI-3B	Not used for Intensity Calculations						4.0			23	
24	9351	0.21	0.70	3-5	DI-3C	Not used for Intensity Calculations						6.5			24	
25	18480	0.42	0.90	EX-6	N/A	136	1.00%	4.7	5.3	84	0.8	5.5	6.5			25
26	6001	0.14	0.90	EX-5	N/A	Not used for Intensity Calculations						6.5			26	
27	4715	0.11	0.60	4-1	ES-1	53	1.00%	4.8	0.1	11	0.3	5.1	5.3	6.9	8.8	27
28	4368	0.10	0.50	4-2	DI-7	58	2.55%	5.0	1.4	56	0.8	5.8	5.1	6.7	8.5	28
29	5953	0.14	0.60	4-1	ES-1	63	2.47%	4.3	2.2	35	0.4	5.0	5.3	7.0	8.9	29
30	1849	0.04	0.35	4-2	DI-7	46	7.43%	5.3	No Channel Flow			5.3	5.2	6.9	8.8	30
31	5049	0.12	0.90	Fuel Farm Sump	N/A	Not used for Intensity Calculations						6.5			31	
32	33766	0.78	0.50	4-3	ES-1	187	1.83%	8.7	No Channel Flow			8.7	4.5	5.9	7.5	32
33	45821	1.05	0.35	Ditch RT. 31+50 - 32+50	N/A	175	3.47%	10.7	1.6	96	1.4	12.0	3.9	5.2	6.6	33
34	23184	0.53	0.35	Ditch RT. 32+50 - 33+50	N/A	Add to Area 31			1.5	97	1.4	13.5	3.7	5.0	6.3	34
35	9024	0.21	0.35	Ditch RT. 33+50 - 34+00	N/A	Add to Area 32			0.6	99	2.1	15.6	3.5	4.7	6.0	35
36	133484	3.06	0.35	EX-7	ES-1	Add to Area 33			3.0	271	3.5	19.1	3.2	4.2	5.5	36
37	24544	0.56	0.85	3-8	DI-3A	196	1.13%	5.7	No Channel Flow			5.7	5.1	6.7	8.6	37
M1	3405	0.08	0.35	Ex. Swale (MS-19 #1)	N/A	Add to Area 33			0.3	10	0.2	15.8	3.5	4.6	5.9	M1
M2	28142	0.65	0.35	Ex. Swale (MS-19 #1A)	N/A	Add to Area M1			0.7	50	0.9	16.7	3.4	4.5	5.8	M2
M3	17372	0.40	0.35	Ex. Swale (MS-19 #1B)	N/A	Add to Area M2			0.6	49	1.0	17.7	3.3	4.4	5.7	M3

YOUR VISION ACHIEVED THROUGH OURS.	THIS DRAWING PREPARED AT THE OFFICE OF THE ENGINEER 1001 Boulder Park TEL 804.200.6500 FAX 804.560.1016 www.timmons.com
REVISION DESCRIPTION	DATE
DATE	6/30/2019
DRAWN BY	KPO
DESIGNED BY	KPO
CHECKED BY	CMK
SCALE	N.T.S.

TIMMONS GROUP

Site Development | Residential | Infrastructure | Technology

EAST RAMP 3 ACCESS ROAD

HENRICO COUNTY - VIRGINIA

DRAINAGE AREA SUMMARY

JOB NO. 40930.001

SHEET NO. 02H(01)

I:\2019\0930-RIC_Apport\001_203-DOM_Access_Road\DWG\SheetCD40930.001_203C-02H.dwg | Printed on 6/26/2019 11:28 AM | by Kevin O'Meara

These plans and associated documents are the exclusive property of TIMMONS GROUP and may not be reproduced in whole or in part and shall not be used for any purpose whatsoever, inclusive, but not limited to construction, bidding, and/or construction staging without the express written consent of TIMMONS GROUP.