



DSC NOTICE 191
City of Virginia Beach
Planning Department
Development Services Center
April 30, 2012

Topic: Implementing the Regional Consent Order

Background:

To comply with the Regional Consent Order and with concurrence by the Department of Environmental Quality (DEQ), the Department of Public Utilities (DPU) is adjusting the Regional Technical Standards (RTS) to reflect the City's water consumption data into its sanitary sewer service area planning for pump stations and gravity collection systems.

Discussion:

The City has utilized the Regional Sewage Flow Projection Data Table to calculate on-site non-residential sewage flows for development plans since May 19, 2008. This was an interim solution to allow for the development of a Virginia Beach table which depicts the zoning influences for allowable on-site non-residential and residential flow. That process is now complete and the Virginia Beach Sewage Flow Projection Data Table (see attached table 3-2 from the [Draft 2012 Edition of the City of Virginia Beach Public Utilities Design Standards Manual](#)) will replace the Regional Table for use in the City. Virginia Department of Health (VDH) flow calculations will still be required in order to determine whether pump station upgrade fees apply.

In addition, Design Standards Table 3-1 (see attached), is supplemented with Table 3-3 (see attached). Table 3-1 should be used when calculating the size of sanitary sewer pump station wet wells and gravity sanitary sewer collection systems. Table 3-3 has taken into account zoning influences and must be used for sizing pumps in accordance with the RTS. All new development plans submitted must utilize the Virginia Beach Sewage Flow Projection Table 3-2, Table 3-1 and Table 3-3 as appropriate.

Effective Date: Immediately.

For More Information, Please Contact:

Joshua D. Holt, P.E.

jholt@vbgov.com

(757) 385-8485

Rebecca Mitchell, P.E.

bmitchel@vbgov.com

(757) 385-8674

Zoning	CVB Zoning Classification	Maximum Density (Unit/acre)	Unit Flow (gpd)	Lot Coverage (acre)
A12	Apartments	12	400	1
A18	Apartments	18	400	1
A24	Apartments	24	400	1
A36	Apartments	36	400	1
AG1	Agricultural	1	400	1
AG2	Agricultural	1	400	1
B1	Neighborhood Business District	43.56	250	0.33
B1A	Limited Community Business District	87.12	250	0.33
B2	Community Business District	87.12	250	0.33
B3	Central Business District	108.9	250	0.33
B3A	Pembroke Central Business Core District	108.9	250	0.33
B4	Mixed Use District	36	250	1
H1	Hotel District	80	130	1
I1	Light Industrial District	108.9	250	0.33
I2	Heavy Industrial District	108.9	250	0.33
O1	Office District	43.56	250	0.25
O2	Large Office District	87.12	250	0.25
PDH-1	Planned Development Districts	4.25	400	1
PDH-2/A36	Planned Development Districts	36	400	1
R2.5	Residential - Townhouse	9	400	1
R7.5	Residential – Medium Density, Single Family	3.5	400	1
R10	Residential – Medium Density, Single Family	3	400	1
R15	Residential – Medium Density, Single Family	2.25	400	1
R20	Residential – Low Density, Single Family	1.7	400	1
R30	Residential – Low Density, Single Family	1.1	400	1
R40	Residential – Low Density, Single Family	0.8	400	1
R5D	Residential Duplex District	6	400	1
R5R	Residential Resort District	6	400	1
R5S	Residential Single-Family District	6	400	1
RT1	Resort Tourist District Atlantic Ave	190	130	1
RT2	Resort Tourist District Resorts and Mixed Use	120	130	1
RT3	Resort Tourist District Mixed Use	160	130	1
RT4	Resort Tourist District	18	400	1

Table 3-2.				
Discharge Facility	Contributing Design Units	Flow (gpd/unit)	Flow Duration (hours)	Peak Factor
Dwellings	Dwelling	310	24	2.5
Schools	Gross SF	0.21	8	3.0
Boarding Schools	Per Dorm Room	222	16	3.0
Motels & Hotels	Per Room	151	24	3.0
Trailer courts, Apartments, Condos, Townhomes, and Time Shares	Unit	310	24	2.5
Restaurants (including fast food)	Gross SF	0.52	16	3.0
Service Stations	Gross SF	1.63	16	3.0
Shopping Centers	Gross SF	0.09	12	3.0
Hospitals	Gross SF	0.19	24	3.0
Nursing Homes/Assisted Living	Per Bed	125	24	3.0
Doctor's offices in medical centers	Gross SF	0.06	12	3.0
Laundromats	Gross SF	0.27	16	3.0
Community colleges	Per Student and Faculty	3.1	12	3.0
Theaters (auditorium type)	Gross SF	0.08	12	3.0
Picnic Areas	Gross SF	0.07	12	3.0
Camps, resort day and night w/limited plumbing	Gross SF	0.04	24	3.0
Luxury camps w/flush toilets	Gross SF	0.04	24	3.0
Warehouse	Gross SF	0.10	24	3.0
Convenient Store	Gross SF	0.27	24	3.0
Office Building	Gross SF	0.16	12	3.0
Fitness Center	Gross SF	0.11	16	3.0
Religious Assembly	Gross SF	0.03	6	3.0
Heavy Industrial	Gross SF	0.02	16	3.0
Light Industrial	Gross SF	0.02	16	3.0
Undeveloped Residential	Dwelling	0	24	3.0
Undeveloped other than Residential	Acre	0	24	3.0

Table 3-3.						
Zoning	CVB Zoning Classification	Maximum Density (Unit/Acre)	Lot Coverage	Unit Flow (gpd)	Unit	Peaking Factor
A12	Apartments	12	1	310	Unit	2.5
A18	Apartments	18	1	310	Unit	2.5
A24	Apartments	24	1	310	Unit	2.5
A36	Apartments	36	1	310	Unit	2.5
AG1	Agricultural	1	1	310	Unit	2.5
AG2	Agricultural	1	1	310	Unit	2.5
B1	Neighborhood Business District	43.56	0.33	160	1,000 Gross SF	3.0
B1A	Limited Community Business District	87.12	0.33	520	1,000 Gross SF	3.0
B2	Community Business District	87.12	0.33	160	1,000 Gross SF	3.0
B3	Central Business District	108.9	0.33	160	1,000 Gross SF	3.0
B3A	Pembroke Central Business Core District	108.9	0.33	160	1,000 Gross SF	3.0
B4	Mixed Use District	36	1	310	Unit	2.5
H1	Hotel District	80	1	151	Per Room	3.0
I1	Light Industrial District	108.9	0.33	160	1,000 Gross SF	3.0
I2	Heavy Industrial District	108.9	0.33	160	1,000 Gross SF	3.0
O1	Office District	43.56	0.25	160	1,000 Gross SF	3.0
O2	Large Office District	87.12	0.25	210	1,000 Gross SF	3.0
PDH1	Planned Development Districts	4.25	1	310	Unit	2.5
PDH2 / A36	Planned Development Districts	36	1	310	Unit	2.5
R2.5	Residential - Townhouse	9	1	310	Dwelling	2.5
R7.5	Residential – Medium Density, Single Family	3.5	1	310	Dwelling	2.5
R10	Residential – Medium Density, Single Family	3	1	310	Dwelling	2.5
R15	Residential – Medium Density, Single Family	2.25	1	310	Dwelling	2.5
R20	Residential – Low Density, Single Family	1.7	1	310	Dwelling	2.5
R30	Residential – Low Density, Single Family	1.1	1	310	Dwelling	2.5

Table 3-3.						
Zoning	CVB Zoning Classification	Maximum Density (Unit/Acre)	Lot Coverage	Unit Flow (gpd)	Unit	Peaking Factor
R40	Residential – Low Density, Single Family	1	1	310	Dwelling	2.5
R5D	Residential Duplex District	6	1	310	Dwelling	2.5
R5R	Residential Resort District	6	1	310	Dwelling	2.5
R5S	Residential Single-Family District	6	1	310	Dwelling	2.5
RT1	Resort Tourist District Atlantic Ave	190	1	151	Per Room	3.0
RT2	Resort Tourist District / Resorts and Mixed Use	120	1	151	Per Room	3.0
RT3	Resort Tourist District Mixed Use	160	1	151	Per Room	3.0
RT4	Resort Tourist District	18	1	310	Dwelling	2.5