

4-15-13

Chesterfield County

***SITE PLAN
APPLICATION
&
CHECKLIST***



**Please complete this Application, print it and deliver it with your plans to:
Chesterfield County Planning Department
9800 Government Center Parkway
Chesterfield, VA 23832**



**Chesterfield County
Planning Department
Chesterfield, VA 23832**

*Planning to sustain,
build and enhance
Chesterfield County*

tel: (804) 748-1050
fax: (804) 717-6295
website:
www.chesterfield.gov/plan

FOR OFFICE USE ONLY	
Rec'd by _____	Case No. _____
Date Rec'd _____	Fee Amount _____
Time Rec'd _____	Receipt No. _____
Reviewed by _____	Anticip. Hearing Date _____

SITE PLAN REVIEW APPLICATION

(commercial, industrial, multi-family, office and/or institutional)

APPLICANT TO COMPLETE THE FOLLOWING INFORMATION IN FULL

Project Name: _____

Location: _____

Approx. # feet to nearest intersection: _____

Enterprise Zone? Yes No

Reviewed and approved by (check one):

- Director of Planning (A) (Admin. Review)
- Planning Commission (C) (Public Hearing)
- Attached Letter of Designated Authorized Representative (required)

Project Type (check one):

- Agricultural (AG) Commercial (C)
- Industrial (I) Multi-Family (MF)
- Public/Semi-Public (PS) Mixed Use

Submittal Type with # of plans required to be submitted for review (check one):

- Erosion Control (4)
- Landscape Plan (2)
- Minor Site Plan (8)
- Schematic (8)
- Site Plan (13)
- Appeal (no plans)
- Site Plan Adjustment (12) Case# _____

Statistical Summary:

- A. Hotel/motel (Y/N) # of rooms _____
- B. Multi-family/condo/mobile home (Y/N) _____
- C. # of dwelling units _____
- D. Maximum building height in feet _____
- E. Number of floors _____
- F. Number of buildings _____
- G. Total gross bldg. sq. ft. _____
- H. Public water (Yes / No) _____
- I. Public sewer (Yes / No) _____
- J. Total site acreage _____
- K. Total disturbed acreage (**base fees on this amount**) _____
- L. Sidewalks in ln. ft. _____
- M. Trails in ln. ft. _____

Comments: _____

APPLICANT INFORMATION

If applicant or others associated with project are not already registered with the planning department, please complete applicant registration form. Previously registered information must be verified for accuracy.

Applicant One _____ (Owner and/or Developer) Email address _____	Regist. No. _____
Applicant Two _____ (Co-Applicant)	Regist. No. _____
Agent One _____ (Site Design Consultant) Email address _____	Regist. No. _____
Agent Two _____ (Attorney or other)	Regist. No. _____

SUBJECT PARCEL INFORMATION

This data can be obtained from the Planning Department.
 Tel (804) 748-1050 Fax (804) 717-6295 E-mail: planning@chesterfield.gov

Attach a GIS map showing location(s) of subject parcel(s).
 Contact Environmental Engineering at (804) 748-1035.

Submitted with (check one) Site Plan Minor Site Plan

FOR OFFICE USE ONLY

GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						
GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						
GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						
GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						
GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						
GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						
GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						
GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						
GPIN		Partial Parcel?	Site Acreage	Zoning	Existing Land Use	Zoning Sheet	Magisterial District	Plan Area
Address		YES <input type="checkbox"/> NO <input type="checkbox"/>						

INVESTIGATION WORKSHEET FOR GRAVES, MEMORIALS AND PLACES OF BURIAL

SUBMITTED WITH THE FOLLOWING (CHECK ONE)

- Site Plan Application Minor Site Plan Application Tentative Subdivision Application
 Final Check Subdivision Application Parcel Plat

I have investigated property located at _____

And described as _____ and _____ which is
(Geographic Parcel Identification Number) (Tax Map Number)

undergoing either site plan or subdivision review by Chesterfield County and find that:

Select One: Graves, objects or structures marking places of burial **exist** on the property.

Graves, object or structures marking places of burial **do not exist** on the property.

This information was verified by (check one or more)

- Deed Description Visual Verification
 Soil Borings Other (specify) _____

Any such feature has been identified on the proposed Site Plan or Subdivision Plat and generally is comprised by the following: _____

Signature: _____ Date: _____

Printed Name: _____ Phone Number: _____

The following space is for use by the Historical Society

Verified by: _____ Phone Number: _____

Date: _____ Fax Number: _____

Comments: _____

Submitted with (check one):

- Site Plan
- Minor Site Plan
- Subdivision Plan

SITE UTILIZATION SURVEY FORM

CHESTERFIELD COUNTY
 INDUSTRIAL WASTE PRETREATMENT PROGRAM
 DEPARTMENT OF UTILITIES
 P.O. BOX 608
 CHESTERFIELD COUNTY, VIRGINIA 23832-9998



BUSINESS NAME: _____ ACCOUNT NUMBER: _____

SERVICE ADDRESS: _____ SIC CODE # _____
(Standard Industrial Classification)

MAILING ADDRESS: _____ SIC CODE TITLE/DESCRIPTION/GROUP: _____
(City/County) _____ (State) _____

PHONE NUMBER: () _____

CERTIFICATION STATEMENT

I CERTIFY THAT THE INFORMATION PROVIDED IS TRUE AND REPRESENTS, TO THE BEST OF MY KNOWLEDGE, THE INFORMATION REQUESTED. I ALSO ACKNOWLEDGE THAT I AM THE MOST QUALIFIED PERSON ON SITE TO ASSESS THE OPERATIONS OF THIS BUSINESS.

 SIGNATURE TITLE COMPANY NAME DATE

PRINT or TYPE NAME

QUESTIONS	YES Y	NO Y
Does the facility utilize Chesterfield County's Sanitary Sewer System? If YES, please answer the following: Average Estimated Daily Wastewater Discharged _____ Gallons/CCF per day (You may write in the CCF total from your most recent water bill in lieu of gallons per day) Total Number of Employees _____	—	—
Are hauled waste services utilized at any time of the year? If yes, please check all that apply: Septic Tank <input type="checkbox"/> Grease Trap <input type="checkbox"/> Grit Trap <input type="checkbox"/> Oil/Water Separator <input type="checkbox"/> Other: (describe) _____	—	—
Is this facility located in a strip mall or other multi-unit building?	—	—
Does your business discharge, or have the potential to discharge, a waste product to the sewer system <i>OTHER THAN</i> normal sanitary wastewater?	—	—

5. Provide a brief description of the business(es) at this address. Also, list any operations or processes which may be associated with this address.

ATTACHMENT A

SIZING WATER SERVICE LINES AND METERS DEPARTMENT OF UTILITIES CHESTERFIELD COUNTY, VIRGINIA

Business Name:	Address of Building:	
Development Name:	Project Number	Type of Use _____ Map I.D. No. _____
I certify that the information on this form is true and correct. Applicant Name (Print) _____ Phone # _____ (Signature) _____ (Local Phone # Desired) _____		

PART A Fixture	Fixture Value 60 psi	No. of Fixtures	Total Fixture Value
Bathtub	8	X	= _____
Bedpan Washers	10	X	= _____
Bidet	2	X	= _____
Dental Unit	2	X	= _____
Drinking Fountain – Public	2	X	= _____
Kitchen Sink	2.2	X	= _____
Lavatory	1.5	X	= _____
Showerhead (Shower Only)	2.5	X	= _____
Service Sink	4	X	= _____
Toilet - Flush Valve	35	X	= _____
- Tank Type	4	X	= _____
Urinal - Pedestal Flush Valve	35	X	= _____
- Wall Flush Valve	16	X	= _____
Wash Sink (Each Set of Faucets)	4	X	= _____
Dishwasher	2	X	= _____
Washing Machine	6	X	= _____
Hose (50 ft Wash Down) - 1/2 in.	5	X	= _____
- 5/8 in.	9	X	= _____
- 3/4 in.	12	X	= _____
Combined Fixture Value Total			= _____

PART B	<u>Line</u>	=	_____ gpm
	1. Domestic Demand (Verification by County Staff - See Conversion Table)	=	_____ gpm
	2. Fixed Demand (To include all demands except for domestic & irrigation)	=	_____ gpm
	3. Irrigation Demand (From Data Supplied by Site Engineer)	=	_____ gpm
	4. Total Demand	=	_____ gpm
	5. Meter Size based on Total Demand	=	=====
	(Verification by Co. Staff - Use Water Meter Sizing Table – Attachment B of Development Section Procedure #344)	=	=====

COUNTY USE ONLY Actual Meter Size _____ Virtual Meter Size _____
 Sized By _____ Date _____ Public Sewer Ready Yes _____ No _____
 Treatment Plant _____



Chesterfield County Fire Department – Plans Review
Fire Flow Estimate Form
 International Fire Code Method of Calculating NFF (Needed Fire Flow)

Engineer: _____ Date: _____

Project Name and Address: _____ Calc By: _____

Type of Construction – Based on 2006 Edition of the International Building Code

Number of Stories: _____

Total Ground Floor Area – Including Projections (Canopies, Loading Docks, Etc): _____

Total Area of Other Floors – Including Basements _____

Total Building Area in Square Feet _____

FIRE AREA CONSIDERED: _____

Note: In order to apply the reduction in area for a building, a fire resistive rated FIRE WALL without openings

shall be provided. WITHOUT OPENINGS refers to no penetrations being permitted (i.e. – doors, duct penetrations, pipe penetrations. (B104.2)

Fire Resistive Rating of FIRE WALL _____ (Hours)

Area In Square Feet Between FIRE WALL or Either Side _____

Required Fire Flow from International Fire Code – Table B105.1 _____

Fire Flow Duration in Hours from International Fire Code – Table B105.1 _____

NEEDED FIRE FLOW : (Based on Total Adjusted Square Foot Area)

Automatic Sprinklers (YES ___ NO ___) Reduction Factor (75% max) _____ % x
 (NFF) _____ = _____ **GPM**

TOTAL GPM: _____

NOTE: MINIMUM REQUIRED FIRE FLOW NOT LESS THAN 1500 GPM
 AT MINIMUM 20 PSI RESIDUAL PRESSURE

FIRE HYDRANTS AND SPACING:

REQUIRED MINIMUM NUMBER OF FIRE HYDRANTS (IFC Table C105.1)

AVERAGE SPACING BETWEEN FIRE HYDRANTS (IFC Table C105.1)

I CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND CORRECT.

SIGNATURE: _____ **P.E.**

(SIGNATURE REQUIRED)

Reference: 2006 Edition International Fire Code, Appendix B, C, and D



Submitted with (check one):

- Site Plan Application
- Minor Site Plan Application
- Subdivision Plan Application

CHESTERFIELD COUNTY

REGISTRATION FORM for APPLICANT or AGENT

Client # _____

OFFICE USE ONLY

Registration Code (check one):

- Developer
or
 Agent (Select type):
- Engineer Surveyor Lawyer
 Landscape Architect Other

Individual or Business Name _____

Contact Person (if business name listed above) _____

Fax Number (_____) _____ E-Mail _____

Address _____

City _____ State _____ Zip Code _____

Area Code (_____) Phone Number (H) _____ (W) _____

Mailing Address (if different from address listed above) _____

City _____ State _____ Zip Code _____

**Please complete the above form, print and submit it to the
Chesterfield County Planning Department. Thank you.**

SUBMITTAL CHECKLIST

ALL OF THE ITEMS LISTED BELOW MUST BE PROVIDED in order for your plans to be accepted for review. Please complete, print your name at the bottom and provide your telephone number. Please telephone the Planning Department at 748-1050 if you have any questions.

<u>ITEM NUMBER</u>	<u>SHEET</u>						
1. Project Name (on cover sheet & in title block of all sheets)	_____						
2. Geographic Parcel Identification Number(s) (GPIN) (shown on the title sheet & layout/site plan sheet)	_____						
3. Name, street address, phone & fax number of the developer owner/agent shown on the title sheet & layout sheet. The same information is needed for the person preparing the plan.	_____						
4. Location Map shown on the title sheet & layout sheet and shall be correct and clear.	_____						
5. Zoning of all adjacent property shown on the layout sheet.	_____						
6. On site plan applications, and on the site plan, list the zoning of the property and all zoning, variance, substantial accord, and other cases that pertain to the site must be shown. Also, label which development district the site is in: Emerging Growth, Post Development, Jefferson Davis Corridor, Village District or other district.	_____						
7. List on the site plan the existing/proposed uses in the building and/or site.	_____						
8. An erosion and sediment control program administration fee must be included as follows:							
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; width: 60%;"><u>Area of Land Disturbance</u></th> <th style="text-align: left;"><u>Fee</u></th> </tr> </thead> <tbody> <tr> <td>10,000 SF or greater</td> <td>\$1360.00 plus \$60 per disturbed acre</td> </tr> <tr> <td>2,500 SF to 9,000 SF</td> <td>\$100.00</td> </tr> </tbody> </table>	<u>Area of Land Disturbance</u>	<u>Fee</u>	10,000 SF or greater	\$1360.00 plus \$60 per disturbed acre	2,500 SF to 9,000 SF	\$100.00	
<u>Area of Land Disturbance</u>	<u>Fee</u>						
10,000 SF or greater	\$1360.00 plus \$60 per disturbed acre						
2,500 SF to 9,000 SF	\$100.00						
9. The plans must bear a signed certification seal of a professional engineer, certified land surveyor, or architect with original signature and dated on cover.	_____						

ITEM NUMBER

SHEET

- 10. An erosion and sediment control plan must be provided with construction narrative and erosion control details. _____
- 11. A drainage area map is required for all on-site or off-site drainage areas. (Maximum scale of 1"=200') _____
- 12. Existing and proposed grading contours must be provided on the plan and must have their elevations clearly labeled. _____
- 13. Calculations must be submitted to support the design of all proposed culverts, open ditches, drop inlets, and storm sewers on VDOT standard calculation sheets. _____
- 14. Profiles must be shown for all proposed storm sewer and outfall channels. _____
- 15. A highly visible note must be provided on the first sheet showing how compliance with the Chesapeake Bay Preservation Ordinance has been accomplished. If compliance has been achieved through the opt-out procedure, the name of the person who performed the CBPA Opt-Out and date of the approval must be shown. _____
- 16. A data map must be submitted which outlines all drainage areas, impervious areas (existing and proposed), RPA and RMA limits, etc. which were used in determining compliance with the Chesapeake Bay Preservation Ordinance. _____
- 17. A copy of the Water Quality Section approval letter for the Resource Protection Area Designation, if applicable, must be provided. _____
- 18. If public water and/or sewer are to be used, the plan must clearly depict the location and alignment of all proposed lines and how they will connect to the existing utility system. _____
- 19. Profiles must be shown for all proposed public water and/or sewer line extension. _____
- 20. Show required and proposed parking calculations based upon parking requirements listed in the Zoning Ordinance. _____
- 21. Provide IFC fire flow calculations on the plans. _____

ITEM NUMBER

SHEET

- 22. A site plan review fee must be included per Section 19-25 of the Chesterfield County Zoning Ordinance. (You may call the Planning Department to verify required fees at 804-748-1050) _____
- 23. Submit completed copy of the VDOT Pre-construction Checklist including consultant's signature. _____
- 24. Submit completed copy of the VDOT Site Construction Plan Checklist including consultant's signature. _____
- 25. Thirteen (13) FOLDED sets of plans. _____
- 26. Applications that are to be heard by the Planning Commission required an 8 1/2" X 11" or 8 1/2" X 14" reduction copy of the site plan for staff reports. _____

Applicant's Name

Phone Number

Consultant's Name

Phone Number

You can assist the Planning Department front counter staff and speed up acceptance of your plans if you bring a GIS map from Environmental Engineering with your site centered on the map. The cost of \$1.00. For your own use, you can also get these GIS maps with existing water, sewer and fire hydrant information for \$2.00 a map. Topography on the GIS maps cost \$12.00 (with water, sewer and fire hydrants included).

REV: November 6, 2012



Submitted with (check one):

Site Plan Application

Minor Site Plan Application

Subdivision Plan Application

**SUBDIVISION AND SITE CONSTRUCTION PLAN
SUBMITTAL CHECKLIST
CHESTERFIELD COUNTY**

CHESTERFIELD RESIDENCY

PROJECT NAME _____ **DATE** _____

DEVELOPER/OWNER _____ **TELEPHONE** _____

ADDRESS _____ **ZIP** _____

GENERAL INFORMATION				
PLAN SHEET TO INCLUDE:		YES	NO	COMMENTS
1.	Project Name. Owner/Developer name, address, telephone and fax number.	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Date of plan.	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Standard cover sheet with surveying & mapping control information. Vicinity map (1" = 2000') & title block information section completed.	<input type="checkbox"/>	<input type="checkbox"/>	
4.	North arrow, designation of north orientation, match lines, scale & sheet numbers for each sheet.	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Seal & signature of registered professional engineer or land surveyor on each sheet..	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Total acreage, current zoning & proposed zoning by acres.	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Adjacent parcel identification: tax map reference numbers, owners names, & present zoning/use of all abutting parcels.	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Date of tentative approval with case number.	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Master plan (all phases or proposed sections).	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Complete site layout: sequential numbering & size (in sq. ft.) of each proposed lot and/or unit.	<input type="checkbox"/>	<input type="checkbox"/>	
11.	State route numbers & names on all existing streets to which connections are to be made.	<input type="checkbox"/>	<input type="checkbox"/>	
12.	All proposed street names.	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Right-of-way lines, width, centerline (stationed at 100' intervals) limits of construction & pavement width or back of curb width.	<input type="checkbox"/>	<input type="checkbox"/>	
14.	General notes explaining details of plan.	<input type="checkbox"/>	<input type="checkbox"/>	

PROJECT NAME _____

GENERAL INFORMATION (CONTINUED)				
PLAN SHEET TO INCLUDE:		YES	NO	COMMENTS
15.	Existing and/or proposed dams, detention basins & any extrinsic structures.	<input type="checkbox"/>	<input type="checkbox"/>	
16.	Grading plan: existing contours, proposed contours, finished floor elevations, design layout for drainage system.	<input type="checkbox"/>	<input type="checkbox"/>	
17.	Legend detailing graphic descriptions for all Road items, drainage & utility items shown.	<input type="checkbox"/>	<input type="checkbox"/>	
18.	Any zoning waivers, variances, proffers and/or imposed conditions for the project submitted with the plans.	<input type="checkbox"/>	<input type="checkbox"/>	
19.	Written description of all plan revisions shall accompany all revised plans submitted for re-evaluation & approval.	<input type="checkbox"/>	<input type="checkbox"/>	

GEOMETRICS				
PLAN SHEET TO INCLUDE:		YES	NO	COMMENTS
1.	Location of project entrance & distance measured to nearest intersection of state route or crossovers for field verification of sight distance.	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Existing entrance, street connections, crossovers, etc., located along state route that may be affected by the development.	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Existing and proposed rights-of-way, width & route number.	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Centerline curve data: delta, radius, arc length, chord & tangent, stationing at intersections, PC's, PT's, etc.	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Actual line & length of horizontal and vertical sight distance at street intersections & any sight distance easements which may be required. A profile is required.	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Depending on method of stormwater conveyance, either radius of all curb returns to back of curb or fillet radius to edge of pavement. Label entrance standard CG-11 and any curb and gutter standards.	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Proposed building location, use sq. footages & offset distance to property lines (sites only).	<input type="checkbox"/>	<input type="checkbox"/>	
8.	All temporary turnaround construction & easements as indicated on the preliminary plans (including radii).	<input type="checkbox"/>	<input type="checkbox"/>	
9.	All proposed property frontage & intersection improvements within the right-of-way.	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Complete dimensions of existing & proposed deceleration, left & right turn storage lanes.	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Road classification schedule with pavement designs.	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Complete typical sections based on Road classifications.	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Guardrail where required.	<input type="checkbox"/>	<input type="checkbox"/>	
14.	CG-12 where required.	<input type="checkbox"/>	<input type="checkbox"/>	

PROJECT NAME _____

PROFILE AND GRADE				
PLAN SHEET TO INCLUDE:		YES	NO	COMMENTS
1.	Existing ground line at centerline, left & right (along edge of Right-of-way).	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Finished grade line for mainline & connections.			
	a. Percent of grade, change of grade elevations (PVI) & length of curves.	<input type="checkbox"/>	<input type="checkbox"/>	
	b. Finished grade elevations (50' tangent, 25' curve) & at intersections, PC's, PT's, PVC's, PVT's, etc.	<input type="checkbox"/>	<input type="checkbox"/>	
	c. Complete stationing at intersections, PC's, PT's, PVC's, PVT's, etc.	<input type="checkbox"/>	<input type="checkbox"/>	
	d. Street names.	<input type="checkbox"/>	<input type="checkbox"/>	
	e. "K" values used for determining minimum sag lengths.	<input type="checkbox"/>	<input type="checkbox"/>	
	f. Vertical sight distance for crests.	<input type="checkbox"/>	<input type="checkbox"/>	
	g. Actual line & length of vertical sight distance at street intersections.	<input type="checkbox"/>	<input type="checkbox"/>	

EROSION CONTROL				
PLAN SHEET TO INCLUDE:		YES	NO	COMMENTS
1.	Erosion control plan when disturbing over 10,000 sq. ft. within existing VDOT right-of-way.	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Location of temporary construction entrance(s) accessing state maintained right-of-way.	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Reference to the required establishment of a temporary vegetative cover on all denuded areas within right-of-way that are not to be fine graded for periods longer than 30 days.	<input type="checkbox"/>	<input type="checkbox"/>	

HYDRAULICS

	PLAN SHEET TO INCLUDE	YES	NO	COMMENTS
1.	Detailed drainage area map defining corresponding sub-areas used for computations showing centerline stationing at 100' intervals, intersections, PC's, PT's, etc., & the proposed storm sewer layout.	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Reference to the hydrologic methodology used including supporting data used in computation of "Q". a) The listed coefficients or "C" values. b) Computations of weighted coefficients "C _w ".	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	
3.	Complete design computations per the following criteria: a) Culverts & closed storm sewer system design capacity for 10-year or 25-year & also capacity computation for 100-year. b) Cross-culverts computations showing sizes, end treatments, length, skewed angles, type of pipe, design cover, invert in & out elevations, outlet velocity. The pertinent calculated information incidental to the design of the culvert shall be tabulated on VDOT standard form LD-269, "Culvert Design Computation." c) Closed storm sewer system include size, velocity, capacity, actual design Q's, length & slope of the pipes, the invert in & out elevations. Pertinent calculated information incidental to the design of the pipeline shall be tabulated on VDOT standard form LD-229, "Storm Sewer Design Computations." d) Curb drop inlet spread shall determine the spacing of inlets for a rainfall intensity of 4.0 inches per hour. Include approach spread at sag inlets; spread lengths, depth of water, length on the inlet & height of the inlet slots. 100-year check storm for all sag inlets. e) Hydraulic grade lines or water surface profile include water surface elevations vs. rim elevations. The H.G.L. for storm sewer systems shall be tabulated on VDOT standard form LD-347 for 10-year & 100-year storms, when involved with a designated 100-year flood plain. f) Open channel computation for 2-year frequency is to be used for determining the need, type & dimensions of special ditch lining for erosion. 10-year frequency shall provide sufficient hydraulic capacity of the channel. Include MS-19 calculations for adequacy of existing channel, as stated in the <u>VA. Erosion & Sediment Control Handbook</u> . g) Include supporting computations for all special design structures such as special design endwalls, inlet, flumes, energy dissipaters, channels, etc.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
4.	Detailed description of all proposed storm sewer structures.	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Graphic details for all non-standard drainage facilities.	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Directions of drainage flow for streets, storm sewer, valley gutters, subdrains, etc.	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Field location for all natural watercourses or drainageways affected by construction, including direction of flow.	<input type="checkbox"/>	<input type="checkbox"/>	
8.	All existing storm drainage systems in plan & profile views.	<input type="checkbox"/>	<input type="checkbox"/>	

PROJECT NAME _____

HYDRAULICS (CONTINUED)					
PLAN SHEET TO INCLUDE		YES	NO	COMMENTS	
9.	Field located limits of 100-year flood zones & backwater inundation.	<input type="checkbox"/>	<input type="checkbox"/>		
10.	Existing and/or proposed VDOT drainage easements dimensional & labeled.	<input type="checkbox"/>	<input type="checkbox"/>		
11.	Driveway entrance culvert sizing computations for each lot.	<input type="checkbox"/>	<input type="checkbox"/>		
12.	Show all types of required underdrains with outlet locations clearly identified and defined. A. CD-1 required for fill to cut transition. B. CD-2 required for sag situations C. All CD's shall be connected to nearest outfalls. UD-4's may be required to make connection to nearest drop inlet. D. UD-4 or UD-5 required for all medians. E. UD-4 edge drains on roadways with design ADT of 1,000 vehicles per day or greater. F. EW-12 required for all outfalls to ditchlines.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		

UTILITIES					
PLAN SHEET TO INCLUDE:		YES	NO	COMMENTS	
1.	Alignment & dimensioned location of all existing utilities within limits of existing & proposed right-of-way.	<input type="checkbox"/>	<input type="checkbox"/>		
2.	Alignment & dimensioned location of all proposed utilities to be constructed within the limits of existing & proposed right-of-way.	<input type="checkbox"/>	<input type="checkbox"/>		
3.	Existing & proposed easements, width & use.	<input type="checkbox"/>	<input type="checkbox"/>		
4.	Details showing method of tie-ins within existing right-of-way.	<input type="checkbox"/>	<input type="checkbox"/>		
5.	Details showing required relocations within existing right-of-way.	<input type="checkbox"/>	<input type="checkbox"/>		

PERMIT WORKZONE					
PLAN SHEET TO INCLUDE:		YES	NO	COMMENTS	
1.	Detailed work area protection layout, to include a construction sequencing/maintenance of traffic narrative for all construction activities within state maintained right-of-way..	<input type="checkbox"/>	<input type="checkbox"/>		

Notes:

1. The developer is responsible for supplying sufficient information for the Department to determine entrance & road design features to adequately serve the existing roadway & the proposed development.
2. Subdivision plans shall be designed in accordance with VDOT's Subdivision Street Requirements and Road Design Manual.
3. All commercial entrances must meet VDOT standards & specifications as designated in Minimum Standards of Entrance To State Highway.
4. The submission is to include 2 copies of the plans for review. An additional copy of the plans is required once final approval is received.
5. A detailed explanation for all "no" answers if required information is not included in the site plan.

CERTIFICATION

I certify that the above stated information is included in the attached plans.

Engineer's Signature

Date



**CHESTERFIELD COUNTY
PLANNING DEPARTMENT
(804) 748-1050
<http://www.chesterfield.gov>**

**DEV. PLAN REVIEW
PUBLIC HEARINGS AUDIO/VISUAL AIDS**

If you plan to present graphic or audio material to the Commission or Board at a public hearing, it is suggested that the material be provided in a form that is easily viewed by those watching on television as well as at the meeting. We offer the following suggestions:

- If you plan to bring a videotape or Power Point presentation, contact Greg Allen at 748-1072 or David Hainley at 748-1967 in the Planning Department a few days prior to the public hearing to make arrangements.
- Prior to the beginning of the public hearing, advise a staff member that you will be presenting audio/visual information.
- Do not bring materials mounted on large boards
- Provide twenty (20) 8½ X 11 copies to the Administrative Secretary for distribution to individual members and to display on an opaque projector.
- Remember that typed information may be difficult to read, so make the font large and dark.
- 35mm slides should be mounted in a Kodak slide carousel. If you do not have a carousel, contact the Planning Department for assistance.

If you have any questions, please contact a staff member prior to the public hearing.