

# King George County Digital Data Submission Requirements and Technical Guide



**Department of Community Development  
Geographic Information Systems (GIS) Office**

## **Introduction**

As part of King George County's ongoing efforts to provide better services to citizens, digital plat/plan submissions are required for all commercial, industrial, major residential subdivisions, utility projects, or any other project deemed as necessary by King George County. Digital submissions are needed for the approved application, as are updated files for each subsequent submission. The digital submission requirements **do not replace** the Zoning Ordinance and Building Code hardcopy requirements. The following digital plat submittal requirements will help speed up the mapping processes, reduce errors, and increase efficiency.

## **Digital Plat Submittal Requirements**

1. Email digital plat/plan as CAD (.DWG or .DXF) or GIS file (shapefile or geodatabase) **and** as a PDF to [Kyleec@co.kinggeorge.state.va.us](mailto:Kyleec@co.kinggeorge.state.va.us) and [dbirge@co.kinggeorge.state.va.us](mailto:dbirge@co.kinggeorge.state.va.us).
2. Only one file submitted, not multiple pages (applies to CAD/GIS file and not PDF).
3. The name of the file, phase of the project, and the date of the submission will make up the name of the file.
  - I.e. Subdivision\_Name\_phase\_09\_19\_2018.dwg
4. Plats and plans will be geo-referenced, using control points in Virginia State Plane Coordinates, North Zone, NAD 83, and US Survey Foot, to match the county's GIS data projection. Also, State Plane Coordinates must exist for at least four corners of the plat/plan.
5. All features on digital maps must have annotations clearly identifying what they are (see next page, Appendix A, for suggested specifications).
6. All digital line types will be solid, continuous, and snapped at intersections.
7. The checklist on pages 5 and 6 will be used to determine and communicate the completeness of the submittal.

## Appendix A

### Graphic File (CAD/GIS) Suggested Specifications

Layer #	Layer Name	Feature Type	Layer Description
1	BLDG1	Polyline	Building/structure outline or footprint
2	PARCEL1	Polyline	Parcel/lot boundaries
3	SUBDIV1	Polyline	Subdivision boundaries
4	ROW1	Polyline	Rights of way delineating private/public land boundary
5	COMAREA1	Polyline	Public areas such as street islands/community entrances
6	GCP1	Point	Ground control points (existing, surveyed, or GPSed)
7	POLE1	Point	Lamp poles, power poles, traffic light poles, etc.,
9	GAS	Polyline	Gas Pipe
10	ELECTR	Polyline	Electrical lines
11	TELCO	Polyline	Phone lines
12	CTVFIBR	Polyline	Cable TV and/or fiber datacom lines
14	PAVEDGE1	Polyline	Edge of pavement
15	CNTRLIN1	Polyline	Street/road centerlines (paved and unpaved)
16	SIDEWLK1	Polyline	Sidewalks (including ramps, if any)
17	CURB1	Polyline	Curb/gutter
18	CARPRK1	Polyline	Parking lots
19	RAIL1	Polyline	Railroads
20	HYDLIN1	Polyline	Linear hydrography, creeks/streams
21	HYDPOL1	Polyline	Polygonal hydrography, lakes/ponds/marsh
23	EAS	Polyline	Utilities, transp., storm drainage/detention, etc.
24	EASBLD	Polyline	Building setback
25	BUFF	Polyline	Buffer (riparian, vegetation, etc.)
27	FP	Polyline	Flood Plain
28	FW	Polyline	Flood way
29	WETLAND	Polyline	Wetlands
31	SDLINK	Polyline	Storm drain culvert, ditch, pipe, etc.
32	SDNODE	Polyline	Storm Drain structure (Manhole, junction box, etc.)
33	SDTEXT	Text	Annotation describing storm drainage (SD) features
35	SSLINK	Polyline	Sanitary sewer pipe
36	SSNODE	Point	Sanitary sewer manholes, pumps, junctions, etc.
37	SSTEXT	Text	Annotation describing sanitary sewer (SS) features
39	WTRLINK	Polyline	Water pipe
40	WTRNODE	Point	Water access/junction box, valves, etc.
41	FIREHYD	Point	Fire hydrant

42	WTRTEXT	Text	Annotation describing water service (WTR) features
43	CTOUR1	Polyline	Un-broken contour lines (* design/as-built)
45	LOTNUM1	Text	Proposed parcel lot number
46	LOTDIM1	Text	Bearings, distances, acreage, and x/y of POB
47	SUBNAM1	Text	Subdivision name
48	RDNAME	Text	Street/road name
49	RTNUM	Text	Route number
50	PAVTYPE1	Text	* Pavement type
51	RAILNAM1	Text	Railroad name
52	HYDNAM1	Text	Hydrographic feature name
53	EASTYPE	Text	Type of easement (utility, transp., wildlife, storm, etc.)
54	CTOURVAL	Text	Elevation of individual contours
55	ADDNUM	Text	Existing/Posted addresses
56	FLDXT	Text	Floodplain zone type

\* Level 50 - Pavement type (PAVTYPE1) include the following standard surface designations: -Asphalt  
-Concrete  
-Bituminous Surfacing  
-Concrete  
-Gravel  
-Dirt

## CHECKLIST FOR DIGITAL DATA SUBMISSIONS

<b>Project Name:</b>	
<b>Date Received:</b>	<b>Date Failed:</b>
<b>Date Passed:</b>	<b>Review Name:</b>

The following is a checklist of required information needed in order to satisfy the King George County digital data submission requirements. These steps are checked in ArcMap.

<b>Section 1-Submittal</b>		
Is there a .DWG/.DXF/.SHP/GDB <u>and</u> PDF file present?	<b>Yes</b>	<b>No</b>
Drawing files named like below example: Subdivision_Name_phase_09_19_2018.dwg?	<b>Yes</b>	<b>No</b>
North American Datum 1983 State Plane coordinates, Virginia North, US Survey Foot?	<b>Yes</b>	<b>No</b>
<b>Section 2-Linear Features</b>		
Parcel present?	<b>Yes</b>	<b>No</b>
Parcel snapped closed?	<b>Yes</b>	<b>No</b>
Subdivision present?	<b>Yes</b>	<b>No</b>
Subdivision snapped closed?	<b>Yes</b>	<b>No</b>
Road Centerline present?	<b>Yes</b>	<b>No</b>
Road Speed Limit present?	<b>Yes</b>	<b>No</b>
Building(s) present?	<b>Yes</b>	<b>No</b>
Row(s) and size present?	<b>Yes</b>	<b>No</b>
Water/sewer lines present?	<b>Yes</b>	<b>No</b>
Paved edge present?	<b>Yes</b>	<b>No</b>
Sidewalks present?	<b>Yes</b>	<b>No</b>
<b>Section 3-Point Features</b>		
Ground Control Points present?	<b>Yes</b>	<b>No</b>
Fire hydrants present?	<b>Yes</b>	<b>No</b>

<b>Section 4-Annotation</b>		
Lot numbers present?	<b>Yes</b>	<b>No</b>
Lot line bearings and distances present?	<b>Yes</b>	<b>No</b>
Lot area (acres or square feet) present?	<b>Yes</b>	<b>No</b>
Subdivision name present?	<b>Yes</b>	<b>No</b>
Road names present?	<b>Yes</b>	<b>No</b>
Centerline distances, including distances to intersections present?	<b>Yes</b>	<b>No</b>
ROW widths, areas, and dimensions present?	<b>Yes</b>	<b>No</b>
Addresses present?	<b>Yes</b>	<b>No</b>
Coordinates for ground control present?	<b>Yes</b>	<b>No</b>
<b>Section 5-Features Present if Present on Paper Submittal</b>		
Easements-Setbacks present?	<b>Yes</b>	<b>No</b>
Road names present?	<b>Yes</b>	<b>No</b>
Pavement type present?	<b>Yes</b>	<b>No</b>
Text describing water, storm water and sewer features present?	<b>Yes</b>	<b>No</b>