Fairfax Permits

GIS LINE FILE for **Utility and Fiber Optic** permit submissions

1. GIS REQUIREMENT:

a) Submit a GIS file showing the proposed work location. This is a "single line drawing" indicating the location of your project. **Note: It is not a digital version of your plan/drawing sheets. This is to show the "<u>location</u>" of your work site, not the detail.**

b) Media type: CD or DVD in Windows format

c) File Types:
- ESRI shapefile **(preferred)**. Include the SHP, DBF, SHX, and PRJ files.
- Google Earth KML files (not KMZ)
- DWG files

d) All DWG files must be **internally geo-referenced** to:
- Virginia State Plane Coordinate System (i.e., not Latitude/Longitude)
- North Zone
- Datum: NAD1983
- Units: U.S. Survey Feet

The easiest way to **geo-referenced** CAD data is to start with **geo-referenced** streets. See Section 3 for information on Street layer files.

2. HOW TO MEET THIS GIS REQUIREMENT:

It is easiest to meet the requirement by drawing your line over top of street data which is already **geo-referenced** to the specified coordinate system.

The basic steps are:
- Load the street data into your GIS or CAD software
- Zoom to your work location
- Create New Shapefile or new DWG layer
    - Draw your line
- Save that line and put the associated files on a CD/DVD.
- Label your disk with the name of your file. Submit it with your Permit Application.

If using Google Earth:
- Find your location
- Click "Add Path" (for Utility & Fiber line permits)
    - Give it a Name
    - Draw your line
- In your Places list, find your newly created line. Right-click it and choose Save Place As.
- Change the Save As Type to "KML"
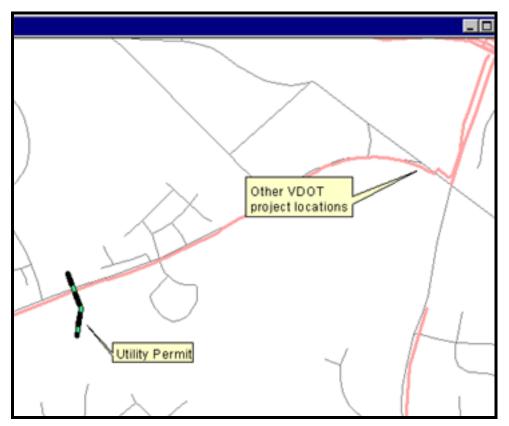- Save it, and copy it to CD/DVD for submission

Figure 1; The thick, green & black line is an example of what should be delivered to VDOT; your proposed work location is then compared with other VDOT activities in the area.

3. STREET DATA
Street data is available from two sources, Fairfax County GIS Division, and VDOT's website.

You can obtain GIS street data from the Fairfax County GIS Office for $25 (http://www.co.fairfax.va.us/maps/cd.htm). This data contains street names (as attributes) which makes it easy to find your work locations. Other useful layers are included on this disk including Tax Map Grids. The data format is an ESRI GeoDatabase or shapefile.

VDOT also has street data in SHP and DXF formats for downloading at this location:
http://www.virginiadot.org/business/fairfax-permits-main.asp
 Only Route Numbers are shown, not Street Names.

Contact Larry Camp in VDOT's Northern Virginia District GIS Section if you have any questions: larry.camp@vdot.virginia.gov
703-259-2970.