Topo Map

Topo maps are useful tools to convey information quickly about proposed property. Topo is short for topographic which are maps showing contour lines that represent land surface elevations. There are some variations between topo maps, but they usually also have the known man-made features also identified such as roads and towns. They can be printed with or without a satellite photo background for additional information. These are helpful for understanding a proposed site, but the photo's background makes it difficult to see the contour lines.

Historically the map making function of the United States was held by the Army Corps of Engineers and the Department of the Interior. In 1879, the United States Geological Survey (USGS) was created which took over this function. The USGS maintains a web site where paper maps can be purchased or downloaded free. The USGS web page is located here:

The easiest search to do is to type in the zip code in the search box and click on the "go" button. This should display a general map of the zip code area divided by gridlines. This may take some time to load to your computer. Within the gridlines are specific map names highlighted in yellow for that grid section. These are usually nearby town names which may or may not have north, south, east, or west also displayed. For example: Cleburne East and Cleburne West.

The map will also have a red click marker indicated somewhere on the map. It may or may not be in the correct grid where the proposed project is located because zip codes cross gridlines. If it is the correct grid, move the crosshair over the red marker and click. If it is not the correct grid, move the crosshair over the correct grid and click the map. It will take a couple of seconds, but a new red click marker will appear for that location. You should then click on that red click marker. You can actually create as many red click markers as you want, one for each grid if desired, but only one correctly placed marker is required.

After clicking on the correct red click marker, a selection box will open. A list of available maps will display. Note that some locations are listed more than once. This is for several reasons which can be reasoned from the information displayed. The map may have different levels of detail requiring different digital data use, the map could be a different size, or the map could be from a different year. Printing out maps from different years may be desirable for some projects to illustrate the historic changes if it has some importance or interest for the propose project.

You can obtain a quick view of the maps by clicking on the "<u>view</u>" link for each map. A very small pop-up of the map will appear. It is too small for use, but does help you identify the type of map that is available. When you are finished with the small map, click on the "close X" to get rid of the map. You may have to scroll down on the larger map to see the "close X" button.

To save a map, click on the links located under the "Download" column that are identified by the size of the file, for example – "5.6MB". A selection box will appear prompting you to open, save, or cancel. It is recommended that you click the "open" button. The two previous commands will take some time to load. When the file is opened, a new dialog box will appear with the zipped file located there. Move the cursor over the file name and double click to open. When the map opens, it is recommended to perform a "save as" command under the "file" heading. Name the map as desired and locate it in your computer files as needed. You will now have a PDF which can be used and edited for the environmental report.

The PDF saved to your computer can be edited as any other PDF file. In addition, you can edit the display by turning off or on the layers of the map. Open the saved map and look along the left side of the screen. There is a list of three items under the title "layers". These are, Map Collar, Map Frame, and Images. The Map Collar is everything outside the margins of the map or essentially the header and footer information. The Map Frame is the grid and contour lines. The Images is the satellite photo background.

There is a symbol of a human "eye" located in front of the three layers of the map. You can turn the layers off and on by moving the screen pointer over the "eye" and clicking. The map will regenerate and turn that layer off or on. If the layer is off the "eye" will not be seen. To turn the map layer back on, click where the "eye" is located. You can print out what layers you want to see. For just a satellite photo, it is recommended to turn off the Map Frame layer. For a topo map, it is recommended to turn off the Images layer.

Adjacent to the "eye" is a "+" symbol which can be clicked to open additional layer options to turn on and off for printing a map. The Map Frame layer may have useful sub-layers to change, but the Map Collar and Image layer is limited in options.

Another useful tool for PDF files is found in the Adobe Acrobat header. Click on the symbol of a "camera". The screen arrow will turn into a crosshair. This will be used to locate a box or window around the portion of the screen you want to print out. It is recommended that you click on the map above and to the left of the project site, then drag and click to the below and to the right of the site. A pop-up box will appear indicating that a copy has been made, click OK. A blue window should be on the screen which shows the area to be printed. Click on the print commands as you normally would to produce a copy. Click the escape ("Esc") button to get out of the command.

Use the above instructions to produce the project topo maps. It should be enough for most projects. To obtain detailed instruction directly from the website see the following: http://nationalmap.gov/ustopo/quickstart.pdf . A selection box will appear prompting you to open, save, or cancel. It is recommended that you click the "open" button. You can then print out the ten page instructions if you require them.









