

City of Friendswood Web GIS Mapping Tutorial

The City's Geographic Information Systems (GIS) is now available on the internet with the new online mapping system. GIS is data management tool that connects information to maps.

This program has been built to work on Internet Explorer 6 or later (the latest version may be downloaded from Microsoft at <http://www.microsoft.com/windows/ie/>), you may experience problems using Netscape or an older browser. We suggest that your screen resolution be set to 1024 x 768 or higher for best viewing. If at anytime you are experiencing technical problems hold the Ctrl key & press F5. This will reload all the pages on your browser and restart your mapping session. If problems persist contact the Claunch & Miller, Inc (CMI) GIS administrator (Nick Popovich) at npopovich@claunchmiller.com

To begin a mapping session you will open a new internet explorer browser window and then type the following information into the browser site address:

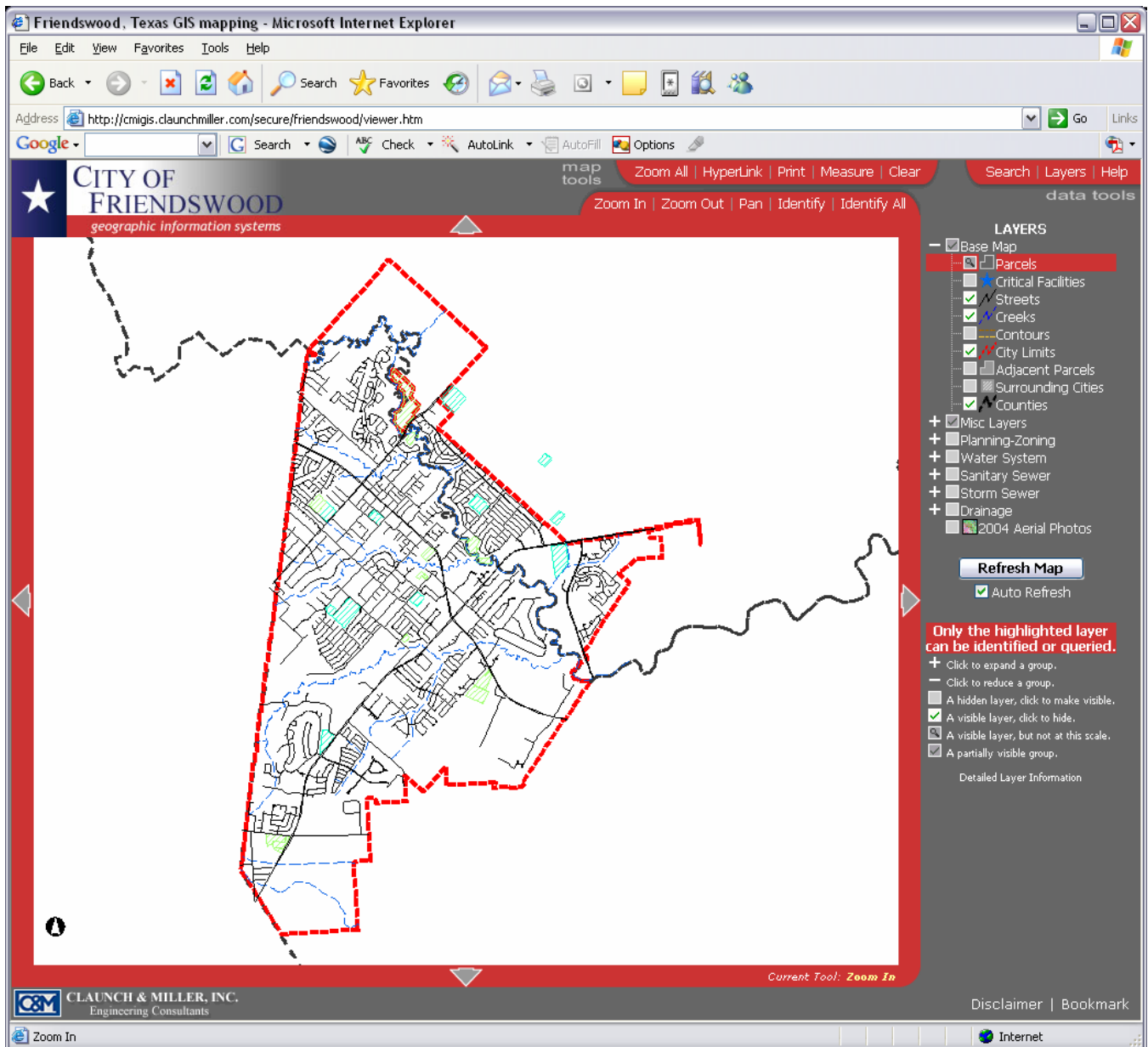
<http://cmigis.claunchmiller.com/secure/friendswood/>

After you enter the correct address a password box will appear. You will enter your assigned user name and password. This will be different from your windows user name and password.



After the system checks your user name and password the mapping session will now begin. Depending on your internet connection speed this may take a few minutes to start because several pages and javascripts will be loaded. You will need to wait until the map is drawn and the screen should look similar to the graphic below. If you receive error messages or the map never appears press Ctrl & F5 or contact the GIS administrator for assistance.

Once this page has been visited once you can use the Bookmark option on the bottom right to add the site to your favorite's link, you must use the link on the bottom of the screen or errors will occur.

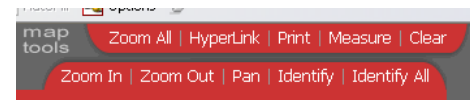


You will see the map of the entire City in the middle of the screen and along the top are map controls, data searching tools and Help information. To the right of the map is the layer information, this area will change depending on the task you are performing. Across the bottom are the Disclaimer & Bookmark links. Information about all of the tools can be found in the Help pages by clicking on the help link in the upper right.

Map Tools

The map tools are the way you will directly interact with the map on the screen. Notice that each tool that you select will change the Current Tool text on the right bottom part of the map & you will also see a custom cursor while over the map.

You can [Zoom In](#) anywhere on the map (This is the default tool when the map session starts). To Zoom In to a certain area on the map simply click on the map hold down your mouse button and drag a box the size of the area you would like to zoom to. When you let off of the mouse the map will be zoomed into the area you specified. [Zoom Out](#) tool works the same way but Zooms Out instead of in. When you zoom out the smaller the box you draw the more the map will zoom out,



the larger the box the less the map will zoom out. If you just simply click on the screen after selecting either Zoom In or Zoom Out the map will Zoom In or Out accordingly by a factor of 2. The **Pan** tool is similar to moving a piece of paper, you simply click and drag the map in the direction you would like to slide it. The scale stays the same the area is just slid. **Zoom All** will zoom you to the entire City Limits.

Identify works on the active layer (this is the layer that is highlighted red in the layers, explained further below) and is used to return tabular information about features on the map. When this tool is used a chart is displayed on the right similar to the one pictured here. This information is unique for each layer and can contain hyperlinks to other websites, for example the table here contains a link in blue to the appraisal district website for this property.

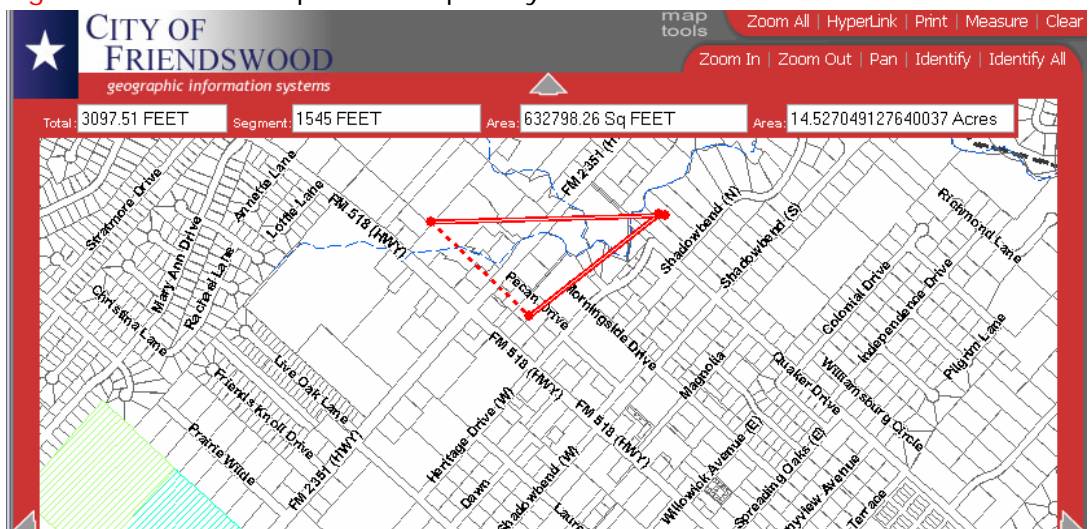
Parcels	
Field	
WebID #	1
HCAD Account	-
GCAD Account	5176-0006-0015-000
GCAD ID	R292443
Owner	HOSKINS, JOHN W & NA
OwnerAdd1	1703 SAN JOSE ST
OwnerAdd2	
OwnerCity	FRIENDSWOOD, TX 775
OwnerZip	
TotalValue	
LegalDisc	ABST 645 PAGE 2 LOT 3
Acreage	0.176
Situs Address	1703 SAN JOSE
SqFeet	7579.13746730737

Identify All tool is a complex tool that allows the end user to identify multiply layer information at one location on a single click. This tool will identify all layers that are turned on, whether they are visible or not. For instance if you turn on Zoning, Subdivisions, and Floodzones when this tool is used it will identify a locations Zone, Subdivision and Floodzone along with all other layers that are turned on. This tool will be demonstrated in detail and may be modified in the future.

The **Hyperlink** tool for now will open a new browser with the appraisal district information for the property layer, this may be used in the future to link documents or pictures.

Once the **Measure** tool is selected four text boxes will be added to the top of the map. These boxes will display the total linear length of the measurements, the segment length, the square feet of the area measured, and the acres of the area measured. **Keep in mind when using the measure tool that this process is data intensive and it's a good idea to wait a few seconds after each click of your mouse when measuring.** Click on the map the first point you want to measure from there move

the mouse to the next point you want to measure and click. A red line will be drawn when it is done and the Total will be updated with the measurement. That is the length on the ground of that red line. If you would like to measure another segment and have it added to this length move your



mouse to the next area on the map, notice that the segment length will change, this is the distance from your last point clicked to your mouse cursor. Once you decide on your next point click again. This will draw another line from your last point to your new point and a dashed line from your very first point to your last point. This will also update your Total with the length of all the solid red lines together and now your area and acreage will be calculated as well. You can continue to add measurements to these totals with more clicks or you can start over and remove the red lines by hitting the **Clear** link on the top.

The **Print** tool will replace the window on the right with a new page to create 8 ½ x 11 or 11 x 17 PDF documents to print. We will also be adding custom size later in order to print the city standard

large maps. You may enter a scale if you would like, remember that the map is in a ratio format of inches to feet thus 1"=100' is 1:1200 to print. This may take a few minutes depending on internet connection speed and detail of layers, you will click on the link when the PDF is available. You can now print, save, email, etc. the PDF file you created.

Data Tools

These consist of three links; Search, Layers, and Help. The [Help](#) link will bring up a new page to the right displaying information about the mapping system usage.



The [Layers](#) link is automatically displayed at default and an example is pictured here. The Layers actually have a built-in small Help guide on the bottom that explains how to turn layers on and off and what the symbols mean. The layers are set up as a tree, there are groups that have layers contained within them. You can turn an entire group on or off, or just selected layers in the group can be turned on or off. You can expand or contract a group by hitting the plus and minus in front of the group name. A layer is turned on and visible when it has a green check next to it. A layer is turned off when it has an empty box next to it. If the box next to it is a grey microscope that means the layer is on but invisible at the current scale, to see the layer you must zoom in closer. If a group has a green check every layer within the group is turned on, if the group has nothing all layers are turned off, but if the group has a grey check only selected layers are turned on within the group. The red highlight on a layer indicates if the layer is active or not. Only one layer may be active at a time and this is important because only features in the active layer can be queried and identified (*id all overrides this*). By default the Property Lines are the active layer. To make a layer the active layer you can click on the layer name and it will highlight red. This is how you change what layer information is returned when using the identify tool.

Keep in mind that the more layers you have on the more intensive the map is to display. So the rule of thumb is, if you don't need a layer, turn it off. Layers are defaulted at start up and the layer state can not be saved.



The [Search](#) tool currently will only search the Property Lines layer, it does this by changing the active layer to Property Lines no matter what it currently is. Keep this in mind when you are identifying features other than property lines. The Search screen has some built in help also listed below in its window and this should be read to understand how this works. You can search by owner name, address, parcel ID or a combination of any of these. This information is taken from the appraisal district records on a quarterly basis. Owner name is entered last name first with a comma in-between last and first names. A tip on searching is to enter the last name and the first initial, this will cut down on misspelling and give you quick results. Addresses are entered as House Number-Street Direction-Street Name-Street Type. Parcel ID is a 13 digit number that is assigned by the harris county appraisal district or an R with 6 digits assigned by the Galveston CAD or a set of 4-4-4-3 digits for the XREF id from GCAD. If no records are found a screen will appear saying no records returned, to try a new search just click the search link again. If one record is found the information for the record will be shown in a table format and the record will automatically be zoomed to on the map. If more than one feature is found all of the table information will be shown on the side. To zoom the map to a unique record simply click on the WebID# for the parcel. You can search using wildcards which is explained in the search help. For example if you want to search for property owners with first name of John you could search for %John%, this would find any records with John including Johnson, Johnny, etc.

Property Search

Name

Address

GCAD

Xref

GCAD R#

HCAD ID

Search Help

Search the property owner database. Due to the fact that the City of Friendswood lies within two counties Galveston & Harris, some unique database situations arise.

You can search by Name, Address, or Parcel ID # for both Galveston & Harris Counties (No parcel will have an ID number for both counties). One or more of the fields need to be entered to search. You can search by just the owner name or you can search by name, address, and property id. After the search is complete, use the WebID # to zoom to each record.

Examples:
Name--Smith, John
Address--319 N Friendswood Dr
GCAD Xref--3300-0005-0015-000
GCAD R#--R123456
HCAD ID--13 digit number

Tips: The search is performed by the amount of information entered. For example Smith, will find all owner names that start with Smith. The database lists owner last names first. So Smith, John, you will find all owners named John Smith.