## Wayland GIS User Manual

## 2013 Edition

Laws Brook Rd



apelo Rd



Wayland GIS User Manual



#### **TABLE OF CONTENTS**

FOREWORD	
SECTION 1: COMPUTER REQUIREMENTS FOR USING WAYLAND GIS a. Installing <i>Microsoft Silverlight</i> On Your Computer	1
b. Installing Adobe Reader On Your Computer	
c. Installing <i>Microsoft Bing 3D</i> On Your Computer	
d. Turning Off The Pop-Up Blocker On Your Computer	3
SECTION 2: OPENING THE WAYLAND GIS WEBSITE APPLICATION	4
SECTION 3: UNDERSTANDING THE WAYLAND GIS HOMEPAGE	5
SECTION 4: USING THE WAYLAND GIS TOOLBAR	6 - 16
a. Map Menu Tab	6
b. Bing Menu Tab	6
c. Bing 2D Toolbar	6
d. Bing 3D Toolbar	7
e. Bing Map Dimension and Map View	8
f. Help Menu Tab	9
g. Map Type (Radio Buttons)	10
h. Zoom, Pan, and View Extent Tools	11
i. Identify and Clear Selected Tools	12
j. Print Tool (Printing and Saving Maps)	13
k. Graphic and Measure Tools	14 - 16
SECTION 5: USING THE WAYLAND GIS MENU SCREEN	17 - 20
a. Staff Login Menu	17
b. Find Menu	18
c. Areas of Interest Menu	19
d. Map Layers Menu	19
e. Map Details Menu	
APPENDIX I: TOWN OF WAYLAND AVAILABLE DATA LAYERS LISTING	21 - 23
APPENDIX II: GLOSSARY OF TERMS AND INDEX	Coming soon
APPENDIX III: CONTACT RESOURCES AND WEBSITE LINKS	Coming soon

## Foreword...



Since 1994, the Town of Wayland has provided the community with a *Geographic Information System (GIS)*. GIS can be defined as a tool that combines maps and statistics interactively

with computer science technology. In a constantly changing world, you can use this information to analyze, capture, manage, manipulate, and store all types of geographic data. GIS allows you to study relationships between multiple geographic data sets, and it can assist you with making informed decisions about your spatial environment.

Although GIS is a valuable tool for analyzing geographic data layers, it <u>cannot</u> be considered a reliable source for depicting survey-grade (or legally accepted) geographic accuracy. This reasoning is primarily a result of how geographic information is created. For example, Town of Wayland property line information is digitized on a computer, based on assessor's maps that were originally drafted by hand. The initial accuracy level of these source maps, combined with the cartographic digitization process, introduces some errors into the data. Each iteration of data modifications can produce even more errors. Although considered minor in terms spatial accuracy, these errors are referred to as "systematic errors". Cartographers are always attempting to correct systematic errors, however there is no guarantee that they will be eliminated altogether. This is why GIS data is not intended for the transfer of real property.

It is also important to note that *legal definition always takes precedent over any suspected geographic data innacuracies, <u>unless</u> a more precise land survey can be produced to overwrite such inaccuracies.* For example, land areas listed on property record cards are based on accepted values that are recorded into property deeds, and therefore they represent legally binding documents between the various parties.

GIS source data is created by a variety of federal, state, local, and private agencies. Such data is intended for many different purposes, and is often compiled at varying map scales. For example, imagine viewing a GIS data layer, originally created by the United States Geological Survey, that depicts rivers and streams. This data layer is constructed at a map scale of 1:25,000 (1 inch on the map represents 25,000 earth surface inches, or 2,083 feet). These rivers and streams are intended to be used at a macro-scale, such as studying a regional or statewide watershed study. However, if you attempt to view this same river and stream data at a closer map view extent (such as studying a specific property parcel), the level of data accuracy and precision will be greatly diminished. Why does this happen? When considering the map scale at which this data layer was created, just imagine dividing one inch into 2,083 individual segments (where each segment represents 1 foot on the ground). Now, from all of those those individual segments, imagine trying to select a specific distance of your choice. If you are really good (and a bit lucky), the segment that you select might be within a distance of 20 or 30 feet of your desired objective. As you can see from this example, it is very difficult to obtain any specific precision from such a scale range. This same principle also applies, if creating such a data layer under similar circumstances.

Understanding where GIS data comes from and learning the appropriate uses of geographic information, will allow you to maximize your online mapping experience and help you to obtain the information that you are seeking. Please remember that the town makes a continual effort to update all GIS data, as such data becomes available. Any GIS is a dynamic undertaking that requires consistent efforts to build and maintain.

The purpose of this instruction manual is to teach you how you can use Wayland's online GIS application to access the town-related geographic information you are seeking. I hope that these instructions will provide you with a better understanding of how you can use this application, and I welcome any questions, comments, or feedback that you have regarding these materials.

Enjoy your online mapping sessions!

Brendan Decker

Brendan Decker, Town of Wayland GIS Coordinator

#### SECTION 1. COMPUTER REQUIREMENTS FOR USING WAYLAND GIS

#### Please read this section carefully, before starting the WAYLAND GIS ONLINE APPLICATION!

To completely access the **Wayland GIS** (also referred to as **CAI Query Manager Online**), you will need to make sure that your computer is up-to-date with the following information:



This section explains step-by-step how to perform the above tasks, to ensure that your computer is capable of running Wayland GIS. Although the information provided in this section will not harm your computer's performance, it is always best to carefully read all instructions before installing anything on your computer, or changing any settings. Also, make sure that you are downloading software applications directly from the software vendors' websites. The information provided in the following sections, will explain which websites to visit if you have any questions or concerns about proceeding further.

#### a. Installing Microsoft Silverlight On Your Computer

#### Note: If you already have *Microsoft Silverlight* installed on your computer, you can skip this step!

After opening Wayland GIS, you might be prompted to *install Microsoft Silverlight* on your computer. C*lick* the install button, and follow the download instructions. If you do not see the message appear below, then you already have Microsoft Silverlight.



What is Microsoft Silverlight? Microsoft Silverlight is a safe and free web-browser plug-in that enables interactive media experiences, rich business applications and immersive mobile apps. This application is required for using Wayland GIS.

Microsoft Silverlight now works on all major computer operating systems, including: Windows, Mac, and Linux. Silverlight also supports all major browsers, including: Mozilla Firefox, Google Chrome, Internet Explorer, and Apple Safari. For more information about this Microsoft product, please visit <u>http://www.microsoft.com/silverlight/what-is-silverlight/</u>

#### b. Installing Adobe Reader On Your Computer

#### Note: If you already have Adobe Reader installed on your computer, you can skip this step!

In order to completely access Wayland GIS, it is reccommended that you *install* **Adobe Reader** on your computer. To install Adober Reader, please visit <u>http://get.adobe.com/reader/?promoid=HRZAC</u>

NOTE: Before installing Adobe Reader, please make sure to read all instructions carefully. If you do not wish to install the McAfee Security Scan Plus (optional software), please make sure to uncheck the box above the software download button, before downloading Adobe Reader.

👔 🕒 Wayland, Massachusetts 🛛 🛪 🍸 📕 Wayland, MA GIS Mappin 🛪 🏋 🚺 Adobe - Adobe Reader, fn 🛪 🏋 🚺 Ado	be - Adobe Reader, fn 🗴 🚬	
← → C fi D getadobe.com/reader/?promoid=HRZAC		☆ 🥭 ≣
Q Search 🖉 📑 3 Yuu 🛅 - 🕬	· 📭 🙆 · 🖂 · 🕲 ·	
Products Business solutions Support & Learning Download Company Buy	Q, Search	
Products exclames scholocitis Support's Learning Commona Company buy	My Adobe Privacy 30 My cart Sign in 3	
Home / Downloads / Adobe Reader /		
Adobe Reader download		
Adobe Reader XI (11.0.03) (47.79 MB)	RESOURCES.	
Your system: Windows 7, English Do you have a different language or operating system?	Learn more about Adobe Reader Adobe Reader system requirements	
	ITIOEM Admins - Distribute Adobe Reader	
WMcAfee®1 Security Scan Plus	IAKE SURE TO UNCHECK THIS BOX, IF YOU	
and the second	O NOT WISH TO INSTALL ADDITIONAL SOF	
es, install McAfee Security Scan Plus - optional (0.9 MB)		
By clicking the Downtoad now button, you acknowledge that you have read and agree to the Adobe Software Licensing Agreement and the McAitee Security Scan Pais License Agreement		
Download now		

What is Adober Reader? Adobe Reader software is the global standard for electronic document sharing. It is the only PDF file viewer that can open and interact with all PDF documents. Use Adobe Reader to view, search, digitally sign, verify, print, and collaborate on Adobe PDF files. For more information about this Adobe product, please visit <u>http://www.adobe.com/products/reader.html</u>

#### c. Installing Microsoft Bing 3D On Your Computer

#### Note: If you already have Microsoft Bing 3D installed on your computer, you can skip this step!

Open the **Wayland GIS application** and locate the **Bing Menu Tab** towards the upper, left-corner of the Map Screen. *Click* on the Bing Menu Tab and *locate* the **Bing Toolbar** underneath. *Click* on **3D**. Follow the installation instructions on the window that appears (pictured below).



What is Microsoft Bing 3D? For more detailed information about Bing 3D, please refer to pages 6-8 in this instruction manual, or visit <u>http://www.microsoft.com/en-us/download/details.aspx?id=6436</u>

#### d. Turning Off Your Pop-up Blocker

Before using Wayland GIS, you **must turn OFF** your web browser's **Pop-up Blocker**. Failing to do this will prevent you from viewing application contents, and it will also prevent you from printing any mapping documents. Locate your web browser (from the list) below, for instructions on how to turn this feature off.

### NOTE: Operating Systems and Web Browsers content changes frequently, so you might need to refer to your content provider for the latest information about turning off your Pop-up Blocker.



#### **MOZILLA FIREFOX**

1. At the top of the Firefox window, *click* the **Firefox** tab and then *select* **Options**.

2. Select the Content panel.

3. Uncheck Block pop-up windows.

**Note:** In the **Content** panel, you can also *click* the **Exceptions...** button, and *type* out the Wayland GIS webpage address <u>http://www.caigisonline.com/waylandma/</u>

#### **GOOGLE CHROME**



1. *Click* on the **Chrome** tab,

located in the upper-right corner of your screen.

- 2. Select Settings.
- 3. Click Show advanced settings

4. In the Privacy section, *click* the Content settings button.

5. In the **Pop-ups** section, *select the* **Allow all sites to show pop-ups** radio button. **Note:** In the **Pop-ups** section, you can also *click* the **Manage exceptions...** button, and *type* out the Wayland GIS webpage address <u>http://www.caigisonline.com/waylandma/</u>



#### **INTERNET EXPLORER**

1. In Internet Explorer, *click* on the **Tools** menu, located on the top of your screen.

- 2. Click Pop-up Blocker.
- 3. Click Turn Off Pop-up Blocker.



APPLE SAFARI

(For OS X)

- **1.** In Safari, *click* on the **Safari** button, located on the browser toolbar.
- 2. When the drop-down menu appears, choose Preferences.
- 3. In the General Preferences dialog box, *click* the Security tab.
- 4. In the Web content section, uncheck Block pop-up windows.

(For Windows)



located in the upper-right corner of your screen.

2. Uncheck Block Pop-up Windows.

(For iPhone and iPad)

1. *Click* on the **Gear icon**,

- 1. On the Home screen, select the Settings icon
- 2. Scroll down and select the Safari label.
- **3.** Safari's settings should now be displayed. In the **Security** panel, *slide* the **Block Pop-ups** radio button to the left, and make sure it reads, "**off**".



#### SECTION 2: OPENING THE WAYLAND GIS WEBSITE APPLICATION

- 1. Open your Internet Web Browser and navigate to the Town of Wayland's website, by *typing* <u>www.wayland.ma.us</u> into the **Search Engine** at the top of your screen.
- **2.** *Place your mouse over* the **Departments** link located underneath the town banner, to expand the list of Town Departments.
- 3. Drag your mouse down to the Town Surveyor & GIS link, and click the mouse button...



...a new webpage should now be open on your computer screen.

**4.** *Click* on the **B** Cogo, to open the **Wayland GIS application**.

C fi 🗋 www.wayland.m	aus/Pages/WaylandMA_GIS/index					\$ 0
		- 19- 0	· × · 30.			
		man la	V C			
		1.1.			Consider the state of the state	
		agea	a			
		MASS	ACHUSETT	Statement		
	an United	and the second s	Con a production of the			
		About Wa	yland Depai	tments Boards & Committee	<b>*5</b>	
				Town Surveyor & G	IS	
		1		Printer-Friendly Version		
	Home Page	Contact:	Alf Berry			
	TOWN RESOURCE	S	Town Surveyor Brendan Decker			
	Phone Directory		GIS Coordinator			
	Where Do I Go For?	Address:	41 Cochituate Ros Wayland, MA 0177			
	Calendars	Phone:	(508) 358-3655 (T			
	Forms & Documents	Fax:	(508) 358-3606			
	Minutes & Agendas	Alt Phone:	(508) 358-3654 (G	S Coordinator)		
	Directions & Hours	Hours:	Monday, 8:00 a.m.			
	QUICK LINKS		Friday, 8:00 a.m. tr	y, 800 a.m. to 4:00 p.m. 12:30 p.m.		
	Board Vacancies	Department	Links:			
	Proposals Destined for	r	and the second sec	Bushasa Blaas Haas as Ci0 Data	Unservice alle Desister of Deside	
	Town Meeting Schools		or Atlas (PDF Format) Surveying Links	Purchase Plans, Maps or GIS Data Town Maps (PDF Format)	Massachusetts Registry of Deeds Town Perambulation Photos (JPG Format)	
	Library	EEMA	Coste Maps	GIS Newsletter (NEWIT)		
	Wayland Cable TV		LICK ON TH. DG	ELOW, TO ACCESS WAYLAND GIS:		
	Housing Authority		land	ELECTI, TO ADDESS MATERIES OIS.		
	Contact Us	way	lana			
	Subscribe to E-Ale					
	For Employees On	5				
	For Retirees Only					
			Surverpartm		_	
	-375-	for the Town	n of Wayland, assisti	(was established in 1964, and provides lan ig with projects for <u>Town Departments</u> , box	id information and engineering services ards, and committees. In addition, the	
				residents with surveying questions they have		

#### SECTION 3: UNDERSTANDING THE WAYLAND GIS HOMEPAGE

When opening the Wayland GIS application, you will notice three major components:

A). The Central Map Screen displays a full extent of Wayland and the surrounding area.

**B).** The Toolbar (located above the Map Screen) allows you to select map backgrounds, identify information, zoom or pan throughout the map, measure distances, draw graphics or enter text, print maps or save out pdf files of your mapping sessions.

**C).** The Menu Panel (located on the left side of the screen) allows you to search property records, select map layers, create abutters lists, and view additional images or related mapping data. The diagram below outlines the major components of the Wayland GIS Homepage.



Before proceeding to the next section, familiarize yourself with the contents of this web page. Feel free to look over the pull-down menus, drag your mouse over and click on the different tools. Try to zoom and pan around the map. *Locate* the **Map Scalebar** and **Map Coordinates** (located along the bottom of the Map Screen). <u>Remember, you cannot break anything on this website by exploring the contents!</u>

Returning to the Map's original extent is simple: *click* on the **Globe icon** side of your computer screen.



in the upper, right-hand

*Note: To return to the Homepage, you can also type into your web browser's search engine:* <u>www.caigisonline.com/waylandma/</u>

#### SECTION 4: USING THE WAYLAND GIS TOOLBAR

**The Toolbar** is located at the top of the Map Screen. On the upper, left-hand side of the Toolbar you will notice <u>three</u> **Menu tabs** that read: "*Map*", "*Bing*", and "*Help*". Towards the upper, right-hand side of the Toolbar you will notice <u>three</u> **Radio Buttons** (in addition to other **Icon Symbols**). These radio buttons read: "*Map Type*", "*Relief*", "*USGS*", and "*Aerial*". This section defines each Toolbar item, and explains how to use each tool during your online GIS mapping sessions.



#### <u>a. Map Menu Tab</u>

Map

"**Map**" is the default Map Screen used for viewing Wayland GIS. *Clicking* on this tab will always return you to the original Map Screen view.

#### <u>b. Bing Menu Tab</u>

**Bing** "Bing" is an interactive search engine powered by *Microsoft*, that is primarily used to view aerial imagery in 3D format. *Clicking* on the Bing tab will switch the Map Screen into an aerial image, and another new tool bar will appear below the Menu Tabs. Notice how the Radio Buttons, Icon Symbols, and Menu Panel all disappear when you enter Bing Mode. You will only need to use the Bing Toolbar when viewing screen information in this mode.

#### c. Bing 2D Toolbar



The Bing Toolbar (shown above) illustrates the default settings when clicking on the Bing menu tab. Here, you can zoom and/or pan around the map. You can also choose different **Map Dimensions** and **Map Views**. *Clicking* on **Labels** will either show or hide Bing map labels. You can also *click* on << , to hide the Bing Toolbar. This action will cause the toolbar to collapse into the upper, right-corner of your Map Screen. To re-display the toolbar, click on the resulting >>.

## NOTE! If you change your Map Dimensions to 3D, you will notice that extra toolbar options appear. This topic will be covered on the next page...

#### d. Bing 3D Toolbar

*Clicking* on the Bing **3D** Toolbar results in the loading of a new Map Screen, and additional toolbar options will now appear. *NOTE: If you see a window pop-up on your screen asking you to download Bing 3D software, please refer to page 3 of this instruction manual.* The additional tools allow you to view the Map Screen in 3D mode. The Graphic below explains how you can either use the toolbar, your keyboard, or mouse to view the Map Screen in Bing Mode 3D.

Current direction of True North, whenever the camera angle is rotated



#### \* Holding down the mouse button, while clicking on these tools allows you to navigate continuously



When loading Bing 3D for the first time, you may notice a **3D Navigation Help** window open on your Map Screen (see graphic at left). Read over the instructions provided and practice using your mouse to navigate in 3D. If you wish to disable the 3D Navigation window from appearing in the future, simply *uncheck* the box labeled, *"Show this screen when you start 3D"*, and then *click* **Close**.

Switch back and forth between 2D and 3D. Notice the changes that appear on your Map Screen when you toggle between the two view modes. In the next section, you will learn more about the relationships between **Map Dimension Modes** and **Map Views**.

(7)

#### e. Bing Map Dimension and Map View

The Bing Toolbar allows you to interact with the Map Screen, by *selecting* both a **Map Dimension** and **Map View**. Using the Bing 3D toolbar, you can view the earth's surface in many different ways:

Map Dimension allows you to select a 2D or 3D vertical plane.

Map View allows you to select a Road, Aerial, or Bird's eye view.

<u>Selecting both</u> a Map Dimension and Map View allows you to analyze every corner of the Map Screen. The table below defines and illustrates the relationships betwen these extents.

**Road** 



#### **Bird's eye**



**Street Map** 



**Aerial Image** 



Aerial Image taken at 45-degree angle (Rotate the camera angle to view different directions)



**3D** 

Street Map with Hill-shading



Aerial Image that can be rotated and tilted (Bird's eye view is disabled in 3D Mode, since you can create the same effects by rotating and tilting the imagery)

The advantage of using **Bing Mode** to view your Map Screen, is that you can switch to 3D Mode, which allows you to rotate and tilt imagery to gain a better perspective of the earth's surface at any given location. Practice using the Bing 3D Toolbar to view the earth's surface area at different angles.

#### <u>f. Help Menu Tab</u>



"Help" is your online resource for obtaining quick and easy access to any information and questions about this website. The Help Topics section can assist you with step-by-step instructions for using the contents of the website while you are online during a mapping session. It also allows you to provide any feedback you wish to offer the software developers. In addition to the Help Topics section, you can also *click* on different sections of the displayed **Map Screen Image**, to obtain more information about selected topics.

Note: The topics listed below are also covered in detail, within this contents of this instruction manul. Please refer to the page numbers below (listed in parenthesis) or the Table of Contents for more information about these topics!



Frequently AskedQuestions(Provides answers to commonly asked questions)

CAI Website (http://www.cai-info.com/)

PROVIDE FEEDBACK (email: webgisfeedback@cai-info.com)

**Remember:** Returning to the Map Screen from the Help Menu, requires *clicking* on the **Map Tab**!

#### g. Map Type (Radio Buttons)

• Relief "Relief" is the default **Map Type** used when starting the Wayland GIS application. This view displays a standard street map, with hill-shading relief. This Map Type is developed by the *Environmental Resources Institute (ESRI)*. For more information about this Map Type, please visit <u>http://www.esri.com/products</u>

Note: The Relief map option is not available at a very detailed parcel view, due to the resolution of the USGS Maps at this scale.

• USGS "USGS" is a **Map Type** you can *select* to view 1:24,000-scale topographic digital maps (also known as 7.5-minute quadrangles). The *United States Geological Survey* began mapping the country in 1879 and completed this map series in 1992. More than 55,000 7.5-minute maps were made to cover the 48 conterminous states. For more information about this Map Type, please visit <u>http://topomaps.usgs.gov/</u>

Note: The USGS map option is not available at a very detailed parcel view, due to the resolution of the USGS Maps.

• Aerial "Aerial" is a Map Type you can *select* to view the Town of Wayland's imagery, at the best scale available. In 2012, the *James W. Sewall Company* was contracted to conduct a flyover of the town. This flyover produced a set of digital color ortho tiles, at a 0.25 Foot Pixel Resolution. For more information about this Map Type, please visit *http://www.sewall.com/* 

Note: Additional aerial imagery layers are available for you to view on your Map Screen. For more information about these additional imagery layers, please refer to the "Menu Panel" Section located in this Instruction Manual.



When you zoom into the Map Screen very closely, you will notice that the *Relief* and *USGS* Map Type Radio Button options disappear. These map options are known as <u>SCALE-DEPENDENT</u>, meaning they only can be accurately viewed at a specific scale range. In this case, these map options are not available when you zoom in, due to the poor-quality resolution of the images that occurs at this "closer" screen view.

#### • Parcel

"Parcel" is a default **Map Type** that only appears once you *zoom* into the Map Screen at a very detailed parcel view. The *Relief* and *USGS* Map Type options disappear at this view, due to their scale-dependency. However, since the Aerial Imagery still maintains good resolution, it is still available. The Parcel Map Type option remains available too, in case you decide to return to an empty map background with parcel boundaries after viewing imagery data at the close range. This is beneficial because it allows you to switch your map type, and still maintain the same view that you are currently zoomed into.

#### h. Zoom, Pan, and View Extent Tools

#### Note: Holding your mouse pointer

#### over a specific tool, provides a description of that tool



"Zoom In" is the default tool that allows you to view the contents of your Map Screen at closer coverage areas. When *placing* your mouse pointer on the Map Screen, you will notice that the "Zoom In" icon appears next to your pointer arrow. There are multiple ways of zooming into the map. *Click* the "Zoom In" icon, if you need to activate it. Using your mouse (make sure the "Zoom In Pointer" should appear on your Map Screen), *click* your left mouse button. You can *hold the left mouse button down*, to zoom in continuously. If you want to zoom into a specific area of the map, *place* your mouse pointer over that area, and *click and drag* your mouse over the area you wish to zoom into (a yellow box will appear over the area you are zooming into). You can also use your keyboard's "+" key to zoom into the map. *Note: The "Zoom In" toolbar icon does not need to be activated when using your computer keyboard's "+" key.* 



"Zoom Out" is a tool that allows you view the contents of your Map Screen at expanded coverage areas. <u>The Zoom Out tool only works after you have previously zoomed into the map</u>. *Click* the "Zoom Out" icon, to activate it. Using your mouse (make sure the "Zoom Out Pointer" appears on your Map Screen), *click* your left mouse button. You can *hold the left mouse button down*, to zoom out continuously. You can also *click and drag* your mouse over an area to zoom outward (again, a yellow box will appear over the area where you are zooming). Using the keyboard, you can press the "-" key to zoom out of the Map Screen. Note: The "Zoom Out" toolbar icon does not need to be activated when using your computer keyboard's "-" key.



**"Pan"** is a tool that allows you view contents of the Map Screen, by shifting the view extent up, down, or to the left and right. *Click* the "Pan" icon, to activate it. Now, *click* anywhere on the map, and *drag your mouse* in the direction where you want to pan. You can also use your computer keyboard's respective **Arrow Keys**, to pan throughout the Map.



"**Previous Extent**" is a tool that allows you to return to any previous view(s) on the Map Screen during a mapping session. Once you have zoomed (or panned) into any map screen, you can *click* on this tool, and you will automatically be redirected to the last map screen you visited. You can use the Previous Extent tool multiple times if necessary. This tool becomes inactive once you have reached the original Map Screen.



"**Next Extent**" is a tool that allows you to return to any view(s) on the Map Screen during a mapping session, <u>after you have already used the Previous Extent Tool</u>. This tool remains inactive until you either zoom or pan around the map screen, <u>and then</u> *click* on the Previous Extent tool. You will notice that the Next Extent tool then activates, by changing into a blue arrow. This tool becomes inactive again, once you have reached the limit of previous extents.



"Full Extent" is a tool that allows you to return to the default Map Screen (showing the entire town view) at anytime during a mapping session, by *clicking* on the icon. *Note: If you use the zoom and/or pan tools during a mapping session and then click on the Full Extent tool, you can <u>still use</u> the Previous Extent tool to visit previously viewed Map Screens.* 

#### i. Identify and Clear Selected Tools



"Identify" is a tool that allows you to select and obtain information about Parcel Features on a Map Screen. It is recommended that you zoom into the Map Screen close enough to view Parcel Boundaries before using this tool. *Click* on the Identify tool to activate it. If you *hold* your mouse pointer over a specific parcel on the Map Screen, you will notice that the Parcel Owner, Property Address, and Parcel ID Number soon appear on the screen. When using the Identify Tool, *clicking* on a parcel automatically highlights that specific parcel and activates the *Map Details Table* (shown below - located in the Menu Panel).

Note: For more detailed information on using the <u>Menu Panel</u> and <u>Map Details Table</u>, please refer to Table of Contents, located in this instruction manual.



"Clear Selected" is a tool that allows you to clear all information on your computer screen, after performing searches that display information on your screen. *Clicking* on this tool automatically clears any highlighted parcels, and disables the Map Details Table.

Note: Once you clear selected features, you cannot retreive any of your searched data.

#### j. Print Tool (Printing and Saving Maps)



"**Print**" is a tool that allows you to <u>**Print**</u> and/or <u>**Save**</u> maps as PDF files. Once you are ready to print (or save) your map, *click* on the Print icon. A **Map Layout** window will open on your computer screen (displayed below):



#### Click on "Cancel" to return to your Map Screen. If you are ready to print, click "OK" to open the <u>Print Window</u>

Click on "Enable Popups" if you need information about why your map is not printing

After choosing your Map Layout settings, *click* the **OK button.** A new **Print Window** will open up, displaying your map. If necessary, use your **computer scrollbar** to scroll down to the bottom of the map. Here, you will notice a **Map Title Bar**, displaying the information you just entered in the Map Layout Screen, containing a Data Disclamer Message, North Arrow, and Developer Logos.

IMPORTANT: How to print and/or save your map <u>depends on which operating system and Adobe</u> <u>software version is installed on your computer</u>. The most common methods are displayed below. However, if you still are experiencing difficulties printing or saving after reading this, please refer to your Computer Operating System, or Adobe's website: <u>http://www.adobe.com/products/reader.html</u>

If you <u>do not</u> see any Toolbars show up on your newly contructed map screen, try *positioning your mouse* towards the **bottom-center** (or **bottom-right**) of your computer screen. Wait a few seconds, and a toolbar should now appear. The icons you see should be similiar to the toolbars displayed below. Follow your computer's instructions for saving or printing your map file.



Note: If you see the toolbar (located at right), *click* the button, and a new toolbar (below) will be now appear at the top of your screen, containing more options.



If you see this toolbar appear on your computer screen, then you are ready to go! Simply *click* on the appropriate command buttons, to either <u>Print</u> or <u>Save</u> your map. There are additional commands you can use, as well. For more information regarding the **Adobe Toolbar**, please refer to the Adobe's website address (hyperlink listed above).

#### k. Graphic and Measure Tools



"Graphic" and "Measure" is a toolset button that allows you to interact with your Mapping Session, by allowing you to "draw" on the screen with a digital pen. After *clicking* this icon, you will then have the option to select Graphic Tools, Measure Tools, or both.

#### **Graphic Tools**

This toolset provides you with many options for adding objects and text to your mapping documents.

It essentially allows you to custom-label your maps with graphics or text. *Click* on the and *select* "<u>Graphic Tools</u>". These tools are desribed below (shown from left-to-right on the Graphics Toolbar).



icon,



Add a Point feature to your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want place a point. *Click* your mouse again, and a point will now appear. You can add as many points as you wish. When you are finished adding points, *click* any other tool to exit this application.



Add a Polyline (straight-line) feature to your map by *clicking* this icon, and then *positioning your mouse* cursor over the screen location where you want to <u>begin placing</u> the line. *Click* your mouse to begin drawing a line. Each time you *click* the mouse button, a new vertix will be added to the line. When you are finished, *double-click* the mouse to finish the line.



Add a Polygon feature to your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want to <u>begin placing</u> the polygon. *Click* your mouse to begin drawing a polygon. Each time you *click* the mouse button, a new vertix will be added to the polygon. When you are finished, *double-click* the mouse to end the polygon.



Add a Rectangle feature to your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want to <u>begin placing</u> a rectangle. *Click and drag* your mouse to begin drawing a rectangle. *Release* your mouse button to finish the rectangle.



**Draw Freehand** on your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want to <u>begin drawing</u>. *Click and hold* your mouse button down as you *drag* the mouse over the area you wish to draw. To finish a freehand sketch, *release* the mouse button.



**Draw Arrow** features on your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want to <u>begin drawing</u> an arrow. *Click and hold* your mouse button down as you *drag* the mouse <u>LEFT</u> or <u>RIGHT</u>. As you *drag*, you can increase or decrease the width of an arrow by *dragging* your mouse up or down. *Note:* You cannot draw an arrow facing "up" or "down" using this tool. You need to use the "Edit Graphics" tool to rotate an arrow (see page 15).

#### Graphic Tools (continued)



**Draw Triangle** features on your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want to <u>begin drawing</u> a triangle. *Click and drag* your mouse to begin drawing a rectangle. You can increase/decrease the length and width of a triangle, by *moving* your mouse up, down, left, or right. *Release* the mouse button to complete the triangle. You can *rotate* a triangle by using the **Edit Graphics** tool.



**Draw Circle** features on your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want to <u>begin drawing</u> a circle. *Click and drag* your mouse to begin drawing a circle. You can expand the circumference of a circle by *moving* your mouse in any direction. *Release* the mouse button to complete the circle.



**Draw Ellipse** features on your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want to <u>begin drawing</u> an ellipse. *Click and drag* your mouse to begin drawing an ellipse. You can expand the ellipse by *moving* your mouse in any direction. *Release* the mouse button to complete the ellipse. You can *rotate* an ellipse by using the **Edit Graphics** tool.



**Draw Text** features on your map by *clicking* this icon, and then *positioning your mouse cursor* over the screen location where you want to <u>place the text</u>. *Click* your mouse button and a **Graphic Text Window** will open on your screen. *Type* in your Graphic Text and *click* the **OK Button** (if you make a mistake, click cancel and start the process over again). Your text will now appear on the map. *Note: You cannot move or erase text features using this tool. You need to use the "Edit Graphics" tool to move text, or use the "Clear All Graphics" tool to erase text.* 



**Edit Graphics** features on your map by *clicking* this icon, and then *selecting* any <u>graphics</u> <u>you have created during your mapping session.</u> You can use this tool to <u>move</u> any features around the Map Screen by *clicking* on a graphics feature and *dragging* it with your mouse to another location. *Release* your mouse button to *place* the feature.

You can also use the Edit Graphics tool to modify the size and shape properties of any line or polygon feature that you create (including arrows, triangles, circles and ellipses). When you use the Edit Graphics tool and click on any of these features, you will notice an **Edit Box** that appears around the graphic feature (shown below).



To <u>rotate</u> a graphic, *click* the **Green Circle** at the top-center of the Edit Box, and *drag* your mouse to the right (or left) while *holding the button down*. *Release* your mouse button once you are satisfied with the rotation angle.

To <u>change the size</u> of a graphic, *click* any *Red Circle* and *drag* your mouse in the direction you wish to modify it.

To <u>change the shape</u> of a graphic, *click* any **Yellow Circle** (graphic verticies) and drag your mouse in any direction.



Clear All Graphics features on your map by *clicking* this icon. <u>Warning: If you click</u> this icon, you will clear ALL previously created graphics on your Map Screen!

#### Measure Tools

This toolset allows you to measure **multiple points on the Map**, (linear ruler) approach, or by calculating land area. *Click* on the "<u>Measure Tools</u>". Then *select* from the following:



either by using a straight-line icon, and *select* 



**Measure Distance** is a tool that allows you to measure linear distances across the Map Screen. *Click* the Measure Distance icon and then *position your mouse cursor* over the feature you want to measure. As you *drag* your mouse, you will notice measurements (in feet) displayed as **Red Annotation**. *Double-click* your mouse to deactivate this tool.



**Measure Area** is a tool that allows you to measure area distances across the Map Screen. *Click* the Measure Area icon and then *position your mouse cursor* over the area you want to measure. After *clicking* <u>at least two points</u>, measurements will appear on your screen. *Note: Area measurements* <u>less than 1 Acre</u> are displayed as Square Feet units.

#### <u>\*Document Tools</u> (These tools are only available to Staff Site users! A password is required)

This toolset allows <u>Town Staff Members</u> to attach **Document Files** (jpg images, pdf files, etc.) to parcels. \*Note: These tools are only available if purchased as an extension to the website application.



**Document Upload** is a tool that allows you to upload files, and attach them to specific parcels. *Click* on this tool icon to attach a file, and then click on the parcel where you to attach the file. A **Document Upload Window** will now open (shown below), where you can upload your files:

Document Upload	Target Owner: Parcel information (the selected parcel address).
Target Owner:       TOWN OF WAYLAND - 38 COCHITUATE RD         Local File:       Select a file to upload         Note:          Document Category:       Floor Plan         Security Level:       • Staff Only         Upload File       Finished	<ul> <li>Local File: Click the button, to locate a file on your computer.</li> <li>Note: Type in this box, to enter text Document Category: Choose a selection from the pull-down menu, or select "New Category" and type in a new category name.</li> <li>Security Level: Click a Radio Button to select "Staff Only" or "Public". This selection determines whether a</li> </ul>
	document is viewable to the public.

When you are finished uploading a file, *click* the **Upload File Button.** When you are finished uploading all files to a parcel, *click* the **Finished Button**, to return to the Map Screen.

## Note: You can upload <u>multiple files to the same parcel</u>. To upload multiple files, repeat the upload process described above (make sure you click the Upload File button after you select each file).



**Document Removal** is a tool that allows you to remove any <u>previously uploaded documents</u>. *Click* on this tool icon to remove a file(s), and then *click* on the parcel containing a document(s) that you want to delete. **A Delete Document Upload Window** will now open. In this window, you will see a list of all your uploaded documents (if there are no documents associated with the parcel, an error message will appear). *Click* the **Delete Button** and repeat the process, if necessary. When you are finished deleting all documents, click the Finished Button to return to the Map Screen.

#### **SECTION 4: UNDERSTANDING THE MENU SCREEN**

**The Menu Screen** is located to the left of the Map Screen. When starting a Wayland GIS Map Session, you will notice <u>five</u> **Menu Items** located on the Menu Screen, plus a **Scrollbar**:



This section defines each Menu Screen Item, and explains how you can use these menus to look-up and query feature information during your online GIS mapping sessions.

#### a. Staff Login Menu (Access is only available to Town Staff Members! A password is required)

Allows Town Staff Members the ability to access a **Staff Site**, that is similar to the Public GIS site, however it offers two additional features (described below). Town staff members who *click* on the "Staff Login" menu, will open a **Login Window** that requires a user to *type* in a pre-determined **User name** and **Password**.

Once logged in

Welcome Waystaff | logout

a user can access the staff site to:

1). Look-up and query additional Geographic Information Layers: In order to keep the Wayland GIS site clean and efficient, certain data layers are stored on the "Staff Site", to prevent unnecessary clutter. These data layers are essentially geographic inventories and application records, that town staff members use during their daily, work-day routines. Other data layers contain private and/or sensitive information, and therefore are not available to the public (without written consent). Although all town geographic data is considered **Public Record**, displaying certain information on a public website is not in the best interests or safety of a community. For more information about **Town Data Layers**, please *contact* the GIS Coordinator.

**2). Use** *Document Tools* **to Upload Documents:** This feature allows town staff members to upload documents and images to selected parcels. To keep the Wayland GIS website clean and efficient, the public is <u>not</u> able to upload any information to the site. For more information about how town staff members can *use* the Document Upload Tool, please refer to *page 16* in this instruction manual.

#### Note: To return to the Public Site, users can click the "Logout" Button, located on the Menu Screen

#### <u>b. Find Menu</u>

Allows you the ability to search for a parcel, by *typing* the name of an **Owner**, **Address**, or **Parcel ID**. Hide (or Expand) the Menu Screen.

Find Search for:	
Enter text here - Push button below	
Find Owner	
Find Address	
Find Parcel ID	

For example, if you want to search parcel information for the address, "**38 Cochituate Road**" you can *type*, "**38 Cochit**" into the Text Box. <u>Make sure to click the</u> <u>Find Address Button after entering your text.</u> You do not need to type out the complete word when entering a search, however the less information you enter can result in multiple search results returned. You should now see <u>three results</u> returned in a table underneath the search buttons:

#### – Menu Screen Scrollbar.

CAMA ID

23-106A

23-106

23-106B

Type text into this box. if you enter a common name (for example, "Smith"),
all applicable results will be returned in the search. For Parcel ID, make sure to enter a correct numerical format (xx-xxx).

Click the appropriate button, to return a search. Or press "Enter" on your computer keyboard to execute an Owner name search. Failure to press the correct search button can result in "No Results Found" message.

Position your mouse over this area (located between the Menu Screen and Map Screen). When you see the doublearrow cursor <>> appear, you can then click and drag your mouse button right or left, to increase or decrease the width of the Menu Screen.

> All Search results will show up on your Map Screen, as a **Push-pin icon** (shown below).



In this search example, all three results are located next to each other, thus you will only see one push-pin icon appear on the Map Screen.

#### Parcel ID Link (click to zoom into a Parcel)

Click row to zoom ...

Owner

TOWN OF WAYLAND

BOSTON EDISON COMPANY

Results Tools

Report

Parcel ID

23-106A

23-106

23-106B

Results Tools (these tools are covered in the "Map Details" section, found on pages of this instruction manual)

Address

Mailing Labels

38 COCHITUATE RD

38 COCHITUATE RD

TENNESSEE GAS PIPELINE CO 38 COCHITUATE RD

Add/Remove Selected

Notice there are three addresses listed for *"38 Cochituate Rd"*. In this case, you will need to refer to additional information for finding a specific parcel. The Results Table displays **Parcel ID**, **Owner**, **Address, and CAMA ID** (parcel ID records used by the Assessors Office). You can use this additional information to make an informed decision as to which specific parcel you are searching information for.

Once you determine which parcel to search, *click* on the **Parcel ID Link.** The Map Screen will now *zoom* to the parcel, and <u>color it yellow</u>. The Find Menu will now collapse, and the **Map Details Menu** will expand. For more information on using the Map Details Menu, please refer to *pages* of this instruction manual.

#### <u>c. Areas of Interest Menu</u>

Allows you the ability to quickly search popular features on the Map Screen, by selecting them from a pull-down menu. These features include **Town Places of Interest** and **Town Streets**.

To select a feature from the **Areas of Interest Menu**, *click* the *solution* button. This will expand the menu, and you now can see a list of available features to select from.

Items are listed in alphabetical order (by Place of Interest, and then by Street Name). *Drag* the scrollbar (located on the right side of the Menu Screen), to view all available features. *Click* on the feature to *zoom* into that location area. *Note: To view specific information about a selected feature, you might need* to <u>turn on additional Map Layers</u> (see below), or <u>use the Identify Tool</u> (see page 12).

#### <u>d. Map Layers Menu</u> Appendix of this instruction manual

Allows you the ability to view numerous available **Geographic Data Layers.** Click the view button, to expand the **Map Layers Menu** (shown below):



#### Click on a "White Triangle", to expand each Map Layer, and to view the Sub-Layers and/or Legend Symbology

(Section of Map Layer Screen, that is shown above)

Adjacent Towns <

Town Boundary

Building Rooftops (2012)

Faded out check boxes indicate that a layer is "on", yet currently <u>invisible</u>.

▲ ✓ Base Map

### Quick Maps: A convenient pull-down menu that allows you to select Map Layers

Click on the Slider Bar and drag your mouse, to change the transparency of the Map Layers

Map Layers: A checked box indicates that a Layer is turned "on". Click the box next to each Map Layer, to turn it "on" and "off".

#### How to Expand and View Map Layers

When <u>turning on</u> a Map Layer, you will notice a small **White Triangle** that appears next to the check box. *Click* on this triangle to expand the Map Layer into additional **Sub-Layers.** Anytime you *click* on a white triangle, you can expand a layer into additional sub-layers, <u>and view a layer's **Legend Symbology.**</u> Once a **Black Triangle** appears, you have reached the limit for expanding a layer or sub-layer.

This Layer is "on", BUT... <u>Sub-Layers need to be</u> <u>turned "on", to become visible on the Map Screen</u>.

This Sub-Layer is <u>active</u> at all Map Scales, BUT... (is turned off, and not visible on the Map Screen).

These Sub-Layers are <u>NOT active</u> at all Map Scales (referred to as "Scale Dependent"), BUT... (are currently turned on, and therefore will become visible when you zoom into the Map Screen close enough to activate the layers).

Legend Symbology displays how the data will appear on the Map Screen, whenever the Layer is visible.

#### <u>e. Map Details Menu</u>

Allows you the ability to *identify* and *analyze* all available information based on a parcel search, including the ability to *view* a **Property Card**, or *create* an **Abutters Report** and/or **Mailing Labels**. Before viewing any information on the **Map Details Menu**, <u>you must first select a parcel, using</u>:



1). The Indentify Tool OR...



to select a parcel.

2). The Find Menu to search and select a parcel.

For more information on searching for and selecting parcels, please refer to the Table of Contents located in this instruction manual.

The Map Details Menu contains two **Table Tabs**: The <u>Parcel Tab</u> and the <u>Other Tab</u>. For more information on using the <u>Other Tab</u>, please refer to <u>page 12</u> of this instruction manual.

The Parcel Tab is activated by default, after you select a parcel. A Building Photo Image will apear in



Click on the Property Card link, to view Parcel Data. Right-click your mouse inside the opened Property Card Window, to Print or Save the Map Details Menu (if building data is available for the selected parcel). Underneath the Building Photo, you can use **Abutters Tools** to locate additonal properties within a specified buffer distance of the selected parcel.

#### Using the Abutters Tools

*Type* a <u>number</u> into the **Distance (ft) Text Box**, and *click* the **Select Button**. The Map Screen will <u>highlight all parcels</u> (displayed in Red), located within the specified buffer distance. Note: If you type a <u>negative number</u>, an interior buffer line will be drawn at the specified distance, along the boundaries of the selected parcel. This interior buffer line can be helpful when evaluating the proximity of map features to their respective parcel boundaries.

You can add or subtract parcels from your Abutters search by *clicking* on the **Add/Remove Selected Button**. After *clicking* this button, *place* your mouse pointer on the Map Screen. The pointer now appears as:

You now can *click* on an empty parcel, <sup>W</sup> to add it to your selection. Or you can



click on a highlighted parcel, to remove it from the selection.

After selecting your Abutters parcels, *click* on the **Report** or **Mailing Labels Buttons**, to create a PDF document that displays **Ownership** and **Mailing Address** information of these selections. You can *Print* or *Save* these documents. *Note: Mailing Labels are designed to fit the* <u>Avery 5160 label template</u>. If you find that the labels do not line up, try changing your print settings to: <u>Scaling = "None"</u> <u>Uncheck "Auto-rotate and Center"</u>

Property: Displays a <u>Selected Parcel's Address</u>

*Data: Use the pull-down menu to view "Property Documents", "Assessment", "Building Data", <u>or additional scanned documents</u>* 

#### APPENDIX I: TOWN OF WAYLAND AVAILABLE DATA LAYERS LISTING

#### WaylandMA Public

#### Base Map

- > Adjacent Towns Labels, Town Boundary Lines, and Boundary Masks
- > Town Boundary Town of Wayland Boundary Line
- Building Rooftops (2012) Building Rooftops from 2012 Town Flyover
- > Parcel ID Numbers Parcel ID Numbers from Town Assessor's Database
- Parcels (2012) Parcel Boundary Lines (last updated on December 2012)
- > Town Road Labels Last updated on December 2012
- > Tax Map Index Assessor Tax Map Reference Grid
- > Tax Map Labels Assessor Tax Map Reference Labels

#### Town Infrastructure

- > Town Landmarks Town Buildings, Cemeteries, Public Schools, Historic Sites, Markers
- Private Landmarks Private Commercial Services (last updated on June 2012)
- Utility Features Hydrants, Utility Poles, Drainage, and Traffic Lights (2012 Flyover)
- Landscape Features Dams, Landfills, Gravel Pits, Waste Storage (2012 Flyover)
- One-Way Streets Displays directional traffic flow of One-Way Streets
- Public or Private Streets Displays street ownership (based on Town Clerk Office Data)
- **Town Scenic Roads** Highlights Town Scenic Roads (based on Town Bylaw)
- **Town Road Network** Interstate Highways, Roads, Streets and private Access Roads
- ▷ Road Pavement Paved and Unpaved land areas (2012 Flyover)
- Sidewalks Public sidewalk line features (2012 Flyover)
- Driveways Public and private driveway line features (2012 Flyover)
- > Parking Lots Public and private parking lot line feautures (2012 Flyover)
- Decks Public Public and private building decks line feautures (2012 Flyover)
- Fences Public and private fences (2012 Flyover)
- Swimming Pools Public and private outdoor swimming pools (2012 Flyover)

#### Town Conservation and Landuse

- ▷ Trees Isolated trees point features (2012 Flyover)
- ▷ Treeline Forested treeline line feautures (2012 Flyover)
- > Trail Network State Trail Networks and Conservation Commission designated trails (2012)
- Elevation Contours (2ft) 2012 Flyover
- > Town Floodplain Overlay Districts See Town of Wayland Bylaws
- Federal Floodplain Districts (FEMA) 2012 data, courtesy of US Dept. of Homeland Security
- ▷ Water Bodies (Lakes and Rivers) 2012 Flyover
- Water Bodies (Streams) 2012 Flyover (compiled with MassGIS data)

#### APPENDIX I: TOWN OF WAYLAND AVAILABLE DATA LAYERS LISTING

#### WaylandMA Public

#### Town Conservation and Landuse (Continued)

- ▷ Wetlands Data is compiled from 2012 Flyover
- DEP Wetlands MassGIS wetlands data, compiled from 1990-2000 imagery photos
- NHESP Certified Vernal Pools MA Division of Fisheries & Wildlife data (2009)
- NHESP Estimated Habitats of Rare Wildlife NHESP scientific data (2008)
- NHESP Priority Habitats of Rare Species NHESP scientific data (2008)
- Federal and State Properties Compiled using Town of Wayland Assessors data (2012)
- **Town Properties** *Compiled using Town Assessors data* (2012)
- **Town Conservation Areas** *Compiled using Town Conservation Commission data* (2012)
- Sudbury Valley Trust Properties Compiled using Sudbury Valley Trust data (2012)
- Aquifer Protection Districts Compiled using MassGIS data (2011)
- Water Capture Zones (2008) Compiled using Wayland GIS 2008 raster image data
- Water Resource Protection Districts Mass. DEP Zone II data, used to compile Zone I (2013)
- > US Census Urban Blocks 2000 US Census Bureau data

#### Zoning and Bylaws

- Historic Districts See Town of Wayland Bylaws (2007)
- Public Elementary School Districts Compiled using Town School Department data (2011)
- Voting Districts See Commonwealth of Massachusetts General Laws (2011)
- > Zoning Overlay Districts See Town of Wayland Bylaws
- > Zoning (Boundaries) See Town of Wayland Bylaws
- > Zoning (Parcels) See Town of Wayland Bylaws

#### Aerial Imagery

- > 2012 Town Aerial Flyover 0.25 ft pixel resolution Aerial Imagery
- > 2008 MassGIS Aerial USGS 1 ft pixel resolution Color Ortho Imagery
- > 2002 Color Infrared False color imagery that is used to facilitate the display of vegetation

#### APPENDIX I: TOWN OF WAYLAND AVAILABLE DATA LAYERS LISTING

#### THE FOLLOWING GIS DATA LAYERS ARE ONLY AVAILABLE ON THE STAFF SITE! FOR MORE INFORMATION, PLEASE CONTACT THE TOWN OF WAYLAND GIS DEPARTMENT

#### ▲ \_Staff

#### Town Infrastructure

- Public Schools Wayland School Department (2011)
- Private Schools or Daycares Wayland GIS Department (2011)
- Private Recreation Sites Wayland GIS Department (2011)
- Registered Sex Offenders (Protected) Wayland Police Department (2010)
- Registered Sex Offenders (1,000ft Buffer) Wayland Police Department (2010)
- ▷ Utility Infrasctructure (pre-2012)
- HAZMAT Sites MassGIS 2011 data (Mass General Law, Chapter 21E and AUL)
- Wellhead Sites Town of Wayland Surveying Department (2012)
- Tennessee Gas Pipeline (300ft Buffer) Town of Wayland Fire Department (2012)
- DPW Access Easements (pre-2012) Town of Wayland Surveying Department (2007)
- DPW Drainage Easements (pre-2012) GPI Data 2005
- DPW Pipeline Conditions (pre-2012) GPI Data 2005

#### Conservation and Landuse

- Conservation Applications Town of Wayland Conservation Department (2011)
- Conservation Protected Properties Town of Wayland Conservation Department (2011)
- Conservation Restrictions Town of Wayland Conservation Department (2011)
- Soils MassGIS 2007 USDA Natural Resources Conservation Service (NRCS)

#### Zoning and Bylaws

- Chapter 61 Land Wayland GIS Department (compiled for Town Planner 2011)
- **Town Commercial Properties** Wayland GIS Department (compiled for Town Planner 2011)
- Residential Site Index Plans (2011) Wayland Assessors Office
- Commercial Site Index Plans (2011) Wayland Assessors Office
- Soning (Conforming Lots) Wayland GIS Department (compiled for Building Dept. 2012)
- Soning (No Information for) Wayland GIS Department (compiled for Building Dept. 2012)

APPENDIX II: GLOSSARY OF TERMS AND INDEX

# Coming Soon!

APPENDIX III: CONTACT RESOURCES AND WEBSITE LINKS

# Coming Soon!