# FIRMette – Desktop 3.0 Installation and User Guide

## Background

The FIRMette – Desktop application was developed to enable the user to create and print a selected portion of a Flood Insurance Rate Map (FIRM). Many users do not have the capability to print an entire FIRM, so the application was designed to allow a portion of the FIRM to be selected and fit, to scale, onto an 8.5" x 11," 8.5" x 14," or 11" x 17" sheet of paper. These mini-FIRMs, called FIRMettes, can be printed or saved in a Portable Document Format (PDF) file. They are considered equivalent representations of the original FIRM panel from which they are made as long as the panel number, north arrow and scale bar are included.

The FIRMette – Desktop application has been upgraded in order to add additional features that include:

- Search for a panel by address*
- Search for a panel by coordinates*
- Search for and download Letters of Map Change (LOMC) for a panel*
- Provide a link to FEMA's Map Service Center (MSC) to download a FIRM*
- Notify users about LOMCs associated with the panel they are viewing**
- Allow users to click on the LOMC number and view the image***
- Print a full-size FIRM****
- Allow users to define the directory locations where the FIRM and LOMC images will be stored and import data currently stored in other directories

## Requirements

- Windows XP (not fully compatible with Vista/Windows 7)
- .NET 2.0 or greater
- Removal of the previous version of the application, if necessary
- Administrative privileges to install
- 5M of space for the installation
- Printing device that can print to the appropriate size
- Third-party software capable of displaying PDF documents

* Internet connection is required
** Internet connection is not required if LOMCs are stored into the proper directories
*** Requires third party PDF software
**** May not be to scale as printers handle image printing in different ways

## Installation

If you have an older version of the FIRMette – Desktop software (F-MIT or version 2.3), remove it before installing the new version. You can remove it by opening the **Start** menu and clicking the **Control Panel** icon. Select **Add or Remove Programs** and follow the prompts to uninstall the software.
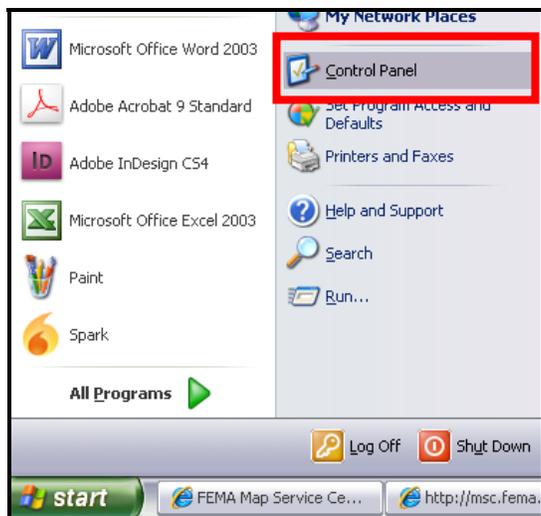


1. Open a Web browser, such as Internet Explorer or Firefox, and go to the FEMA MSC Web site located at http://msc.fema.gov.
2. Click on the download link in the FIRMette – Desktop box to start the installation.
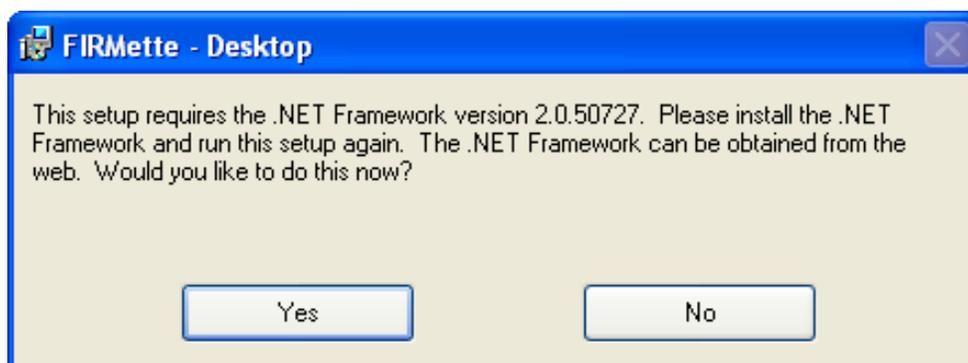
3. You will be prompted to either run the software or save it to your PC. It is encouraged to save the installation software to your PC. If you save the installation software, remember the location of where you save it.

**File Download - Security Warning**

Do you want to run or save this file?

Name: fmit.exe
Type: Application, 34.6MB
From: msc.fema.gov

[Run]  [Save]  [Cancel]

While files from the Internet can be useful, this file type can potentially harm your computer. If you do not trust the source, do not run or save this software. What's the risk?

**Please note that you must have administrator rights on your PC to install the FIRMette – Desktop software. If you need help installing the software, contact your systems administrator.**

4. If you do not have Microsoft .Net Framework installed on your PC, then you will be prompted to install it. You must have administrator rights on your PC to install this software.

**FIRMette - Desktop**

This setup requires the .NET Framework version 2.0.50727. Please install the .NET Framework and run this setup again. The .NET Framework can be obtained from the web. Would you like to do this now?

[Yes]  [No]

5. If you select **Yes**, then continue to step 7. If you select **No**, then proceed to step 10.

6. Clicking **Yes** to install the Microsoft .Net Framework on your PC will direct you to the Web site for installing the latest version of the software. Click **Install it now** and follow the prompts.



7. Once you select **Install it now**, you will be prompted to Run or Save the software. Select the **Run** option.
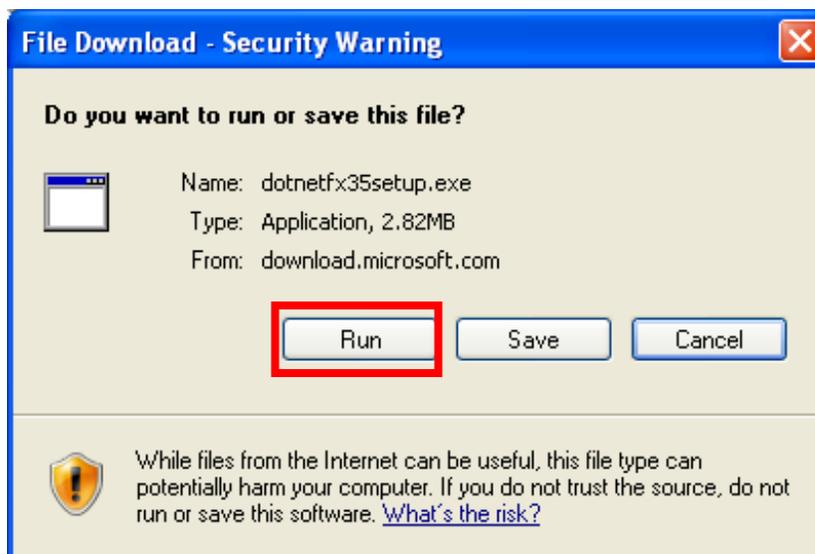
8. Select, "I have read and ACCEPT the terms of the License Agreement." Click **Install**.
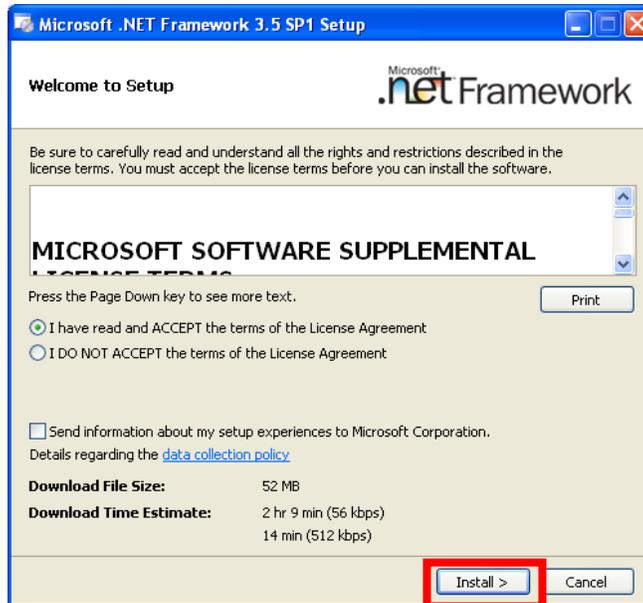


9. Once the installation is complete you will need to restart your PC to properly install the FIRMette – Desktop software.

10. If you chose to run the FIRMette – Desktop software during step 3, then you will need to go to the MSC Web site (http://msc.fema.gov) to open the FIRMette – Desktop software. If you chose to save the FIRMette – Desktop software during step 3, then you will need to navigate to the location where you saved it and double-click the FIRMette – Desktop icon.

11. The software will guide you through the steps required to complete the installation. When you see the following screen, click **Next**.

12. The software will notify you that the installer is ready to install the FIRMette – Desktop on your PC. Click **Next**.



13. You will see the following screen when the installation is complete. Click **Close** to exit the installation.

14. You should now have the FIRMette – Desktop software installed on your PC. The software icon will show up on your desktop and in your Program Files. It will automatically install the application to C:\Program Files\FEMA\FIRMette – Desktop and will create the necessary folders for storing information. The application will also be added to the All Programs menu, which can be accessed by clicking on the Start button, then the All Programs button. Move the mouse over the FIRMette – Desktop folder and click on the FIRMette – Desktop icon that appears.
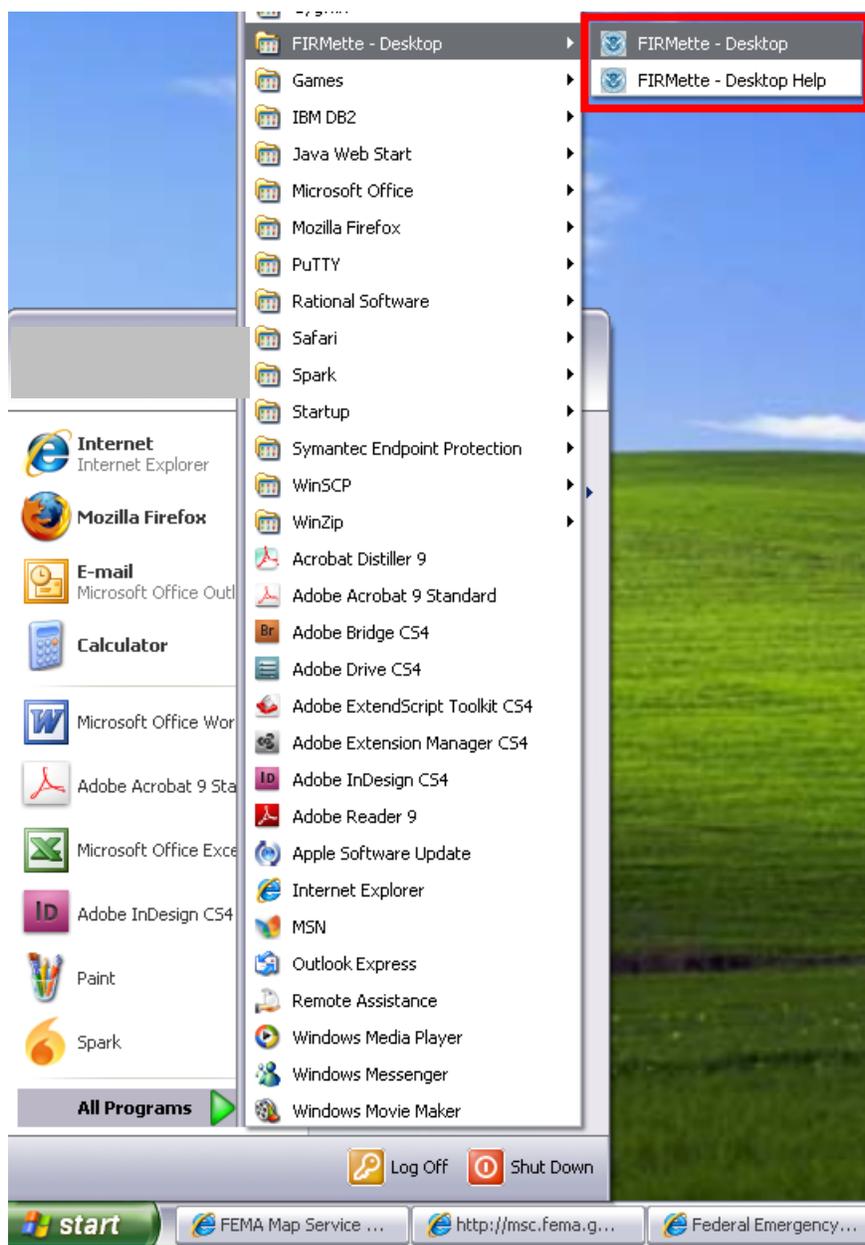
## Setup

## Set Preferences

The FIRMette – Desktop application allows the user to specify different directories where FIRM images (TIF and PNG format) and LOMCs (PDF format) are stored. The default option is to have all panels stored in a single directory called FEMA_Flood_Info that is created under the application directory. LOMCs that are downloaded from the MSC Web site will be saved in directories under FEMA_Flood_Info that are named according to the FIRM panel that they affect. For example, if a LOMC modifies panel 990009C0025D for Flood County, USA, the application will create a directory named 990009C0025D and save the LOMC there.

These default folder options that specify where FIRMs and LOMCs are stored can be changed. This can be done by running the application and clicking on Help on the application's menu bar and clicking on Preferences. This will open the Dialog box where the user can change these settings by clicking on the buttons to the right of each option and browsing to the appropriate directory location. These directories can be on either a local computer or on a network drive where the user has read and write permissions. This should prevent members of an organization from maintaining separate, duplicate copies of these files.

## Import Data

The FIRMette – Desktop application will copy FIRM images stored on a user's local computer or network from their current location into the directory specified in the Preferences dialog box (see Set Preferences section for more information about changing this location). The user can do this by clicking on the File option on the menu bar and clicking on the Import option. This will open a dialog window allowing the user to navigate to the directory where the FIRM images are currently located and select images that are to be copied by clicking on each one. The user can also select all images at once by clicking on the first image and holding the Shift button down while clicking on the last image. Clicking on the Import button will copy these files to the location defined in the preferences dialog box. This import activity will not overwrite files that are already located in the destination directory.



If the user currently has any LOMC files that they would like the FIRMette – Desktop application to use, these should be stored in directories that are named for the panel they affect. These directories should then be moved to the location of the LOMC directory that is defined in the Preferences dialog box (see Set Preferences section for more information about changing this location). Once these LOMC files are located in the proper directories, the application will then be able to recognize that this information exists and will display the list of LOMCs when the appropriate FIRM panel is opened. This function will work with or without an internet connection. If an internet connection is available, the application will download any LOMCs that modify the FIRM panel from the MSC Web site, but it will not overwrite any existing information.

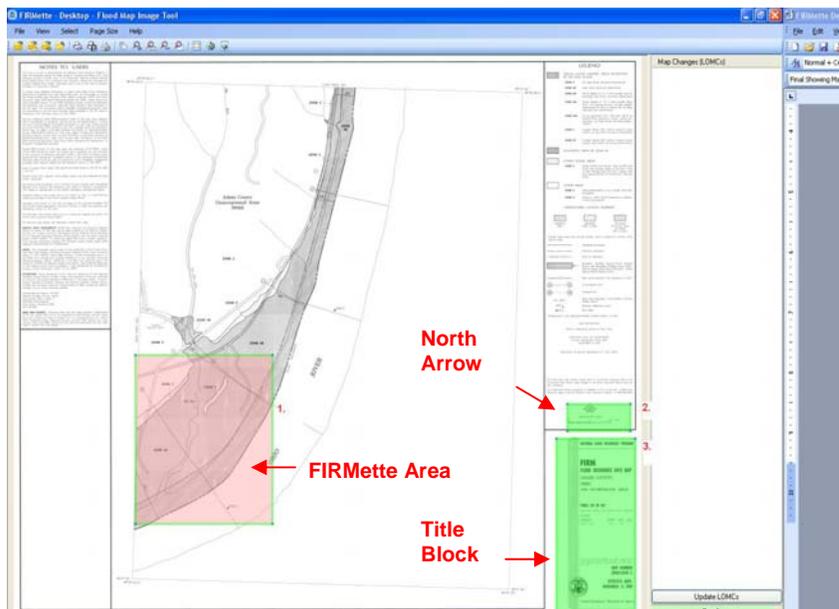## Use the FIRMette – Desktop Application

1. FIRMette Creation
   a. In the FIRMette – Desktop application, open a FIRM panel image that is stored on the local computer or network. This can be done by:
      i. Navigating the mouse to the menu bar and clicking on **File**, then **Open by File Name/Map Number**, or
      ii. Clicking on the **Open by File Name/Map Number** icon on the tool bar, which will open up a dialog box that will allow the user to navigate and select a panel image.



   b. Once the FIRM panel is opened, the user can set the page size of the FIRMette by moving the mouse to the menu bar, clicking on Page Size, and clicking on the appropriate option for 8.5" x 11," 8.5" x 14," or 11" x 17". The graphic which is used to select the portion of the map area will change size accordingly.
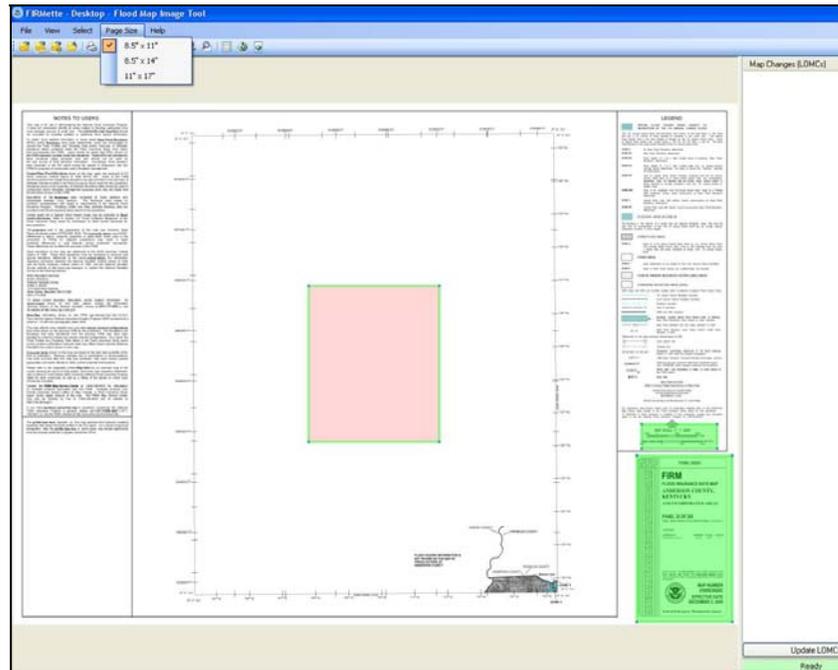
c. Three graphic areas are now visible over the image that highlights portions of the FIRM panel. These areas will appear in the final FIRMette. Each graphic can be selected and moved. Click on the graphic and hold the left mouse button down to drag it to the proper location. The user can also click on the icon in the tool bar to select the graphic and drag it to the proper location by holding down the left mouse button. The Select FIRMette Area tool should be moved to cover the area of interest of the map panel. The Select North Arrow tool should be positioned over the north arrow and the scale bar. The Select Title Block tool should be positioned over the title block of the FIRM panel.

d. Once the graphics are placed in the proper positions, the user can choose to either print the image or save it to a PDF file on the local computer or network. This can be accomplished by either clicking on the **Print** icon in the tool bar or by clicking on **File**, then **Print FIRMette** in the menu bar. Either of these actions will open the Preview FIRMette dialog box that will provide a preview of the final result and provide buttons to Print, Print To PDF or Exit Preview.
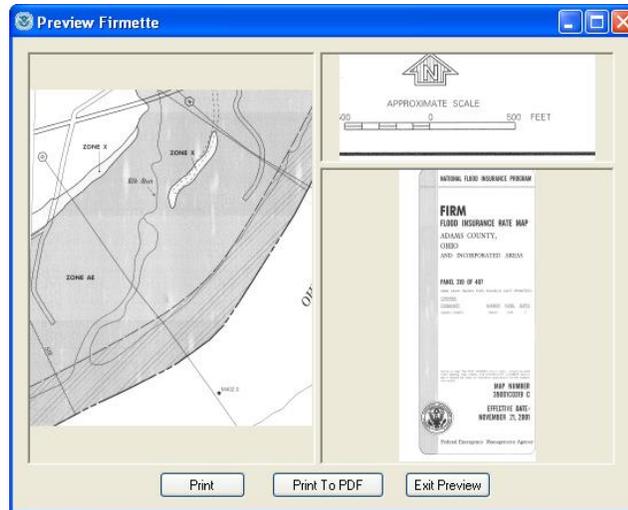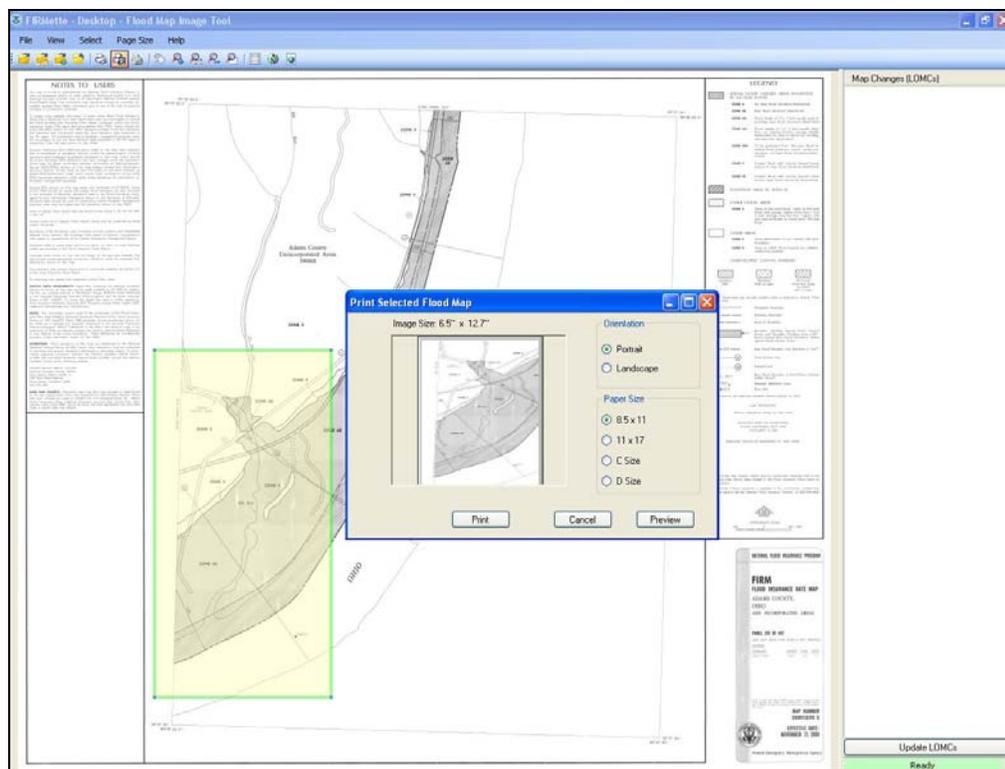


2. Print User-defined Areas
   a. In the FIRMette – Desktop application, open a FIRM panel image stored on a local computer or network by:
      i. Navigating the mouse to the menu bar and clicking on **File**, then **Open by File Name/Map Number**, or
      ii. Clicking on the **Open by File Name/Map Number** icon on the tool bar, which will open up a dialog box that will allow the user to navigate and select a panel image.
   b. Once the FIRM panel appears, the Print Selection tool can be activated by either clicking on **File**, then **Print Selection**, or by clicking on the **Print Selection** icon on the tool bar.
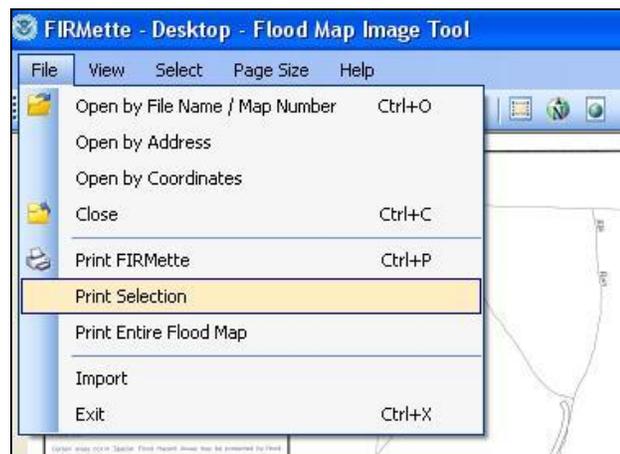
c.  The user can then define an area by clicking and holding the left mouse button to define one corner of the area and dragging the mouse. When the mouse has been moved to the opposite corner of the area of interest, release the left mouse button. This will open the Print Selected Flood Map dialog box which will allow the user to select the appropriate orientation and paper size.

**Please note that the application will attempt to expand the selected area so that it may be printed at maximum magnification on the paper size that has been selected. If this occurs, and the size of the selected area changes, then the FIRMette is considered non-regulatory.**



3.  Full Panel Printing
    a.  In the FIRMette – Desktop application, open a FIRM panel image stored on a local computer or network by:
        i.  Navigating the mouse to the menu bar and clicking on **File**, then **Open by File Name/Map Number**, or
        ii. Clicking on **the Open by File Name/Map Number** icon on the tool bar, which will open up a dialog box that will allow the user to navigate and select a panel image.
    b.  Once the panel is opened and viewable within the application, click on the **Print Entire Flood Map** icon on the tool bar or click on **File**, then **Print Entire Flood Map**.
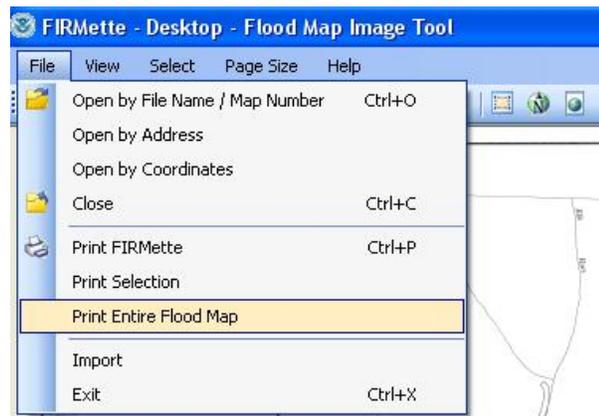
c. The Print Entire Flood Map dialog box appears, which allows the user to print the entire FIRM panel at full size (36" x 25.875") or click on the check box for Print to Standard Page Size and select from a list of page sizes provided: 8.5" x 11," 11" x 17," C Size or D Size. Plots created using the Print to Standard Page Size option will include a note across the top of the page stating "This print is non-regulatory."

**Please verify that full size plots at 36" x 25.875" are to scale as some printers may not print these images properly.**

4. Address Search
    a. This function requires the user to have an internet connection that will allow the FIRMette – Desktop application to communicate with FEMA's MSC Web site (http://msc.fema.gov).
    b. Open the Panel Search Dialog box by either clicking on **File**, then **Open by Address**, or by clicking on the **Open by Address** icon on the tool bar.
    c. The **By Address** tab should be visible and will allow the user to enter an address. Click the **Search** button once the address is entered.
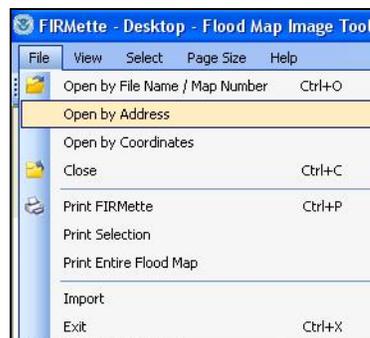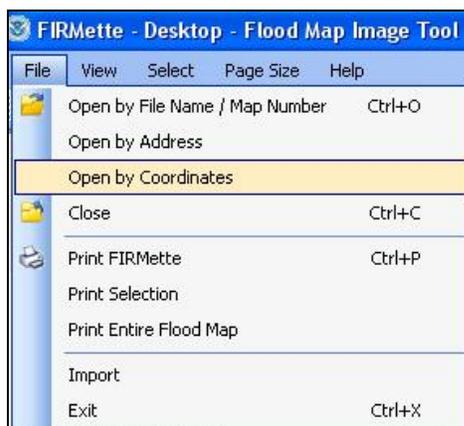


    d. If the application is able to receive the panel number from the MSC Web site, it will search for the panel in the directory that has been specified to store the panel images. The application will either open the panel image or notify the user that the image is not on the local computer and provide a link to the MSC Web site to order the panel image.

**Please verify that the address has been matched correctly since the software that is used by FEMA to convert street addresses into real world (latitude/longitude) coordinates may not have every address.**



5. Coordinate Search
    a. This function requires the user to have an internet connection that will allow the FIRMette – Desktop application to communicate with FEMA's MSC Web site (http://msc.fema.gov).
    b. Open the Panel Search Dialog box by either clicking on **File**, then **Open by Address**, or by clicking on the **Open by Address** icon on the tool bar.



    c. The By Latitude/Longitude tab should be visible and will allow the user to select whether the coordinates will be in Degrees-Minutes-Seconds (DMS) or Decimal Degrees (DD). Once specified, the user can then enter coordinates as they would on the MSC Map Search page and click on the Search button.
    d. If the application is able to receive the panel number from the MSC Web site, it will search for the panel in the directory that has been specified to store the panel images. The application will either open the panel image or notify the user that the image is not on the local computer and provide a link to the MSC Web site to order the panel image. This search method is more accurate than the address search.
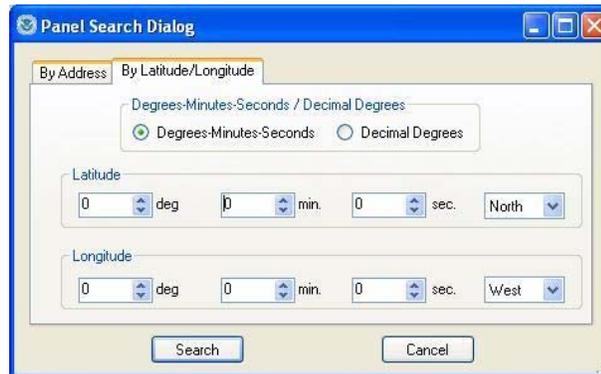
6. LOMC Notification, Download, and View
   a. This function works automatically when a FIRM panel is opened by the application. When a FIRM panel is opened, the application will search for any LOMCs that are stored within the designated directory that is discussed in the Set Preferences portion of this document.
   b. If the computer has an internet connection, the application will connect to the MSC Web site (http://msc.fema.gov), check for LOMCs for the FIRM panel that has been opened, and download any image files that have not already been stored within the designated directory. This process will not erase or overwrite any LOMCs that have already been stored within the designated directory.
   c. The list of LOMCs that are found for the FIRM panel that has been opened will be listed in the Map Changes portion of the application.
   d. Any LOMCs that are listed can be opened by double-clicking on the case number. This requires a separate application that is capable of viewing files in PDF format.