



Practical Systems

Improving the business of farming



FarmMap Quick Start Guide

Fully GPS capable graphics mapping program for property, water, environmental, grazing and crop rotation planning.

FarmMap

© 2010 ... Practical Systems Limited

All rights reserved. No parts of this work may be reproduced in any form or by any means - graphic, electronic, or mechanical, including photocopying, recording, taping, or information storage and retrieval systems - without the written permission of the publisher.

Products that are referred to in this document may be either trademarks and/or registered trademarks of the respective owners. The publisher and the author make no claim to these trademarks.

While every precaution has been taken in the preparation of this document, the publisher and the author assume no responsibility for errors or omissions, or for damages resulting from the use of information contained in this document or from the use of programs and source code that may accompany it. In no event shall the publisher and the author be liable for any loss of profit or any other commercial damage caused or alleged to have been caused directly or indirectly by this document.

Publisher

Practical Systems

Production

Belinda Casey

Copyright 2010 Practical Systems Pty Limited
PO Box 876, Armidale NSW 2350

Telephone: (02) 6772 6672 Fax: (02) 6771 3737
Toll Free 1800 624 688

Website: www.practicalsystems.com.au
Email: sales@practicalsystems.com.au

Quick Start Guide Contents

Part 1 Quick Start Guide for FarmMap

- 1 Quick Start Guide Icons
- 1.1 How to Install FarmMap
- 1.2 Registration

Part 2 How to Find Help

- 2 Finding Help When You Need it
- 2.1 On Screen Help
- 2.2 Demonstration Data
- 2.3 Practical Systems Software Support

Part 3 Getting Started

- 3 Getting started
- 3.1 Frequently used Icons and Handy Hints

Part 4 Set up

- 4 Calibration
- 4.1 Backing up
- 4.2 Understanding the layer control

Part 5 Using FarmMap

- 5 Drawing a paddock
- 5.1 Adding a layer heading and a drawing layer
- 5.2 Adding an icon
- 5.3 Drawing a line
- 5.4 Adding a label
- 5.5 Measuring from point to point

Part 6 The GPS Layer

- 6 Using the GPS layer
- 6.1 Importing GPS points from a DBF file
- 6.2 Using the sample GPS points to draw an enclosed area.



For more detailed instructions, please refer to the full FarmMap Manual within the program under Help > Getting Started Manual.

Quick Start Guide for FarmMap

The hardest part about using new software is getting started. This Quick Start Guide offers the quickest way to begin using Practical System's FarmMap

1 Quick Start Guide Icons



Learn a bit



Do a bit



Important information

1.1 How to Install FarmMap

There are two ways to install our programs:

1. Practical Systems website www.practicalsystems.com.au

Go to **Customers Support** > **Customer Login** and login using your client ID and password.

Install the full program or update your existing program through our website.



2. Install from the installation disk.



Insert the Installation CD into your CD drive.

The CD will run automatically and open the Installation Screen.




1.3 Registration


To register your purchased copy of FarmMap after the program has been installed, please phone Practical Systems on 1800 624 688 for your unique unlock code.

2 Finding help when you need it

Help and Electronic Documents


 By going to the **Help menu** you will find a full **FarmMap manual** and a search function for quick access to help on a specific subject.


2.1 On Screen Help

 To summon help from within a specific area of the program relevant to the screen you are on:

 Press the **F1 key** or click the  **button** at the bottom right of the screen.

2.2 Demonstration Data

 The **Demonstration Farm** in FarmMap has been created so that you can start viewing and drawing straight away. This allows you to experiment without the worry of affecting your own map or property plan. This helps you explore and understand the features of FarmMap

 Go to **File > Change farms**
Select **Demonstration farm** from the list.

2.3 Practical Systems Annual Subscription.

 Keeping your Annual Subscription up to date will ensure:

- **Your software is always current.** Your Annual Subscription entitles you to all **program updates** and **upgrades**.
- **Help is always at hand.** Annual Subscription provides you with **telephone support** during business hours (8.30am to 5.30pm Monday to Friday AEST) to help you through any queries or problems you may have. Use of this service is unlimited for your period of cover.

Phone: 1800 624 688

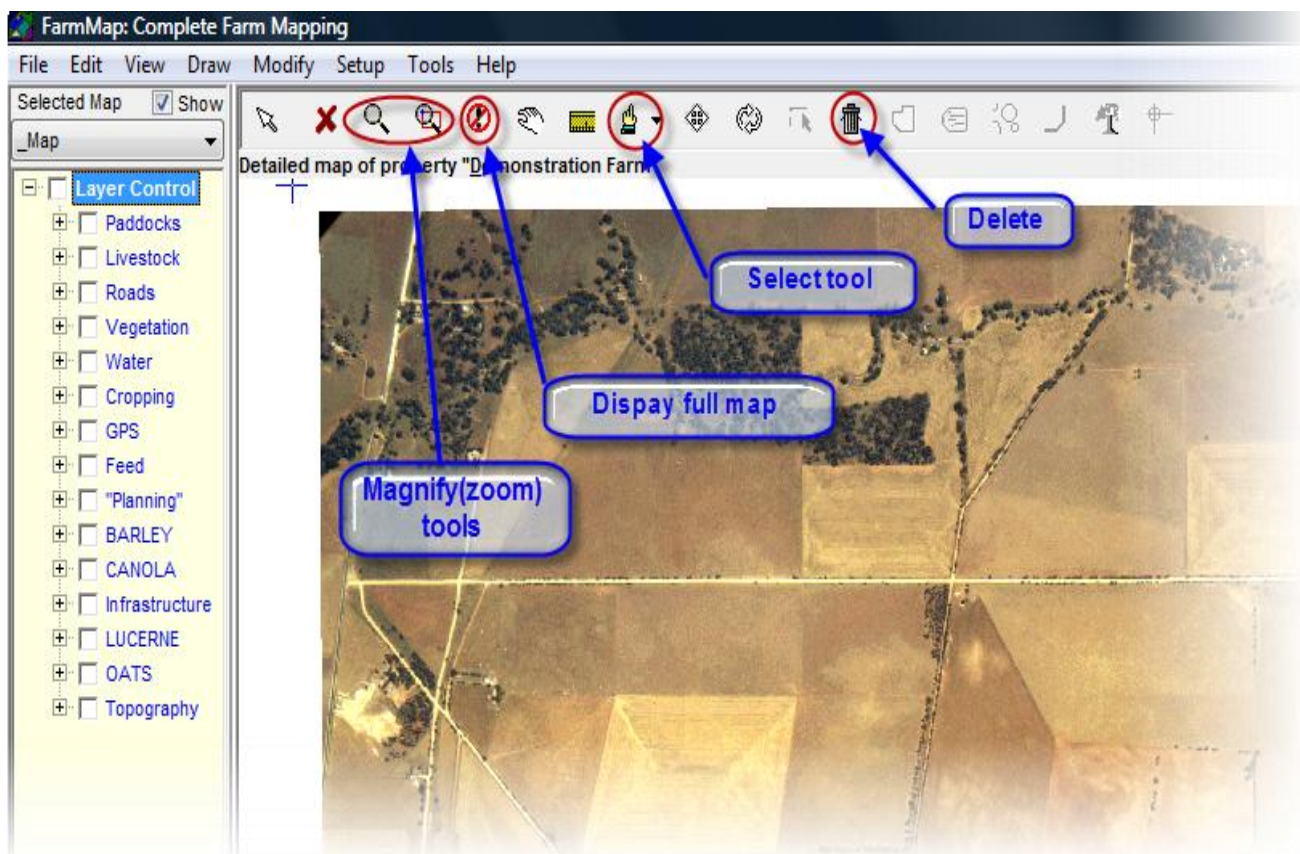
- You are provided with **regular Practical Tip emails** in the form of a step by step guide that will help you keep getting the most from your software.
- You are provided with **newsletters**.

3 Getting Started



As mentioned previously, the hardest part about using new software is getting started. This guide illustrates a quick method of setting up and using FarmMap.

3.1 Frequently used Icons and Handy Hints.



To **zoom in** select the magnifying glass and click on the screen. To **zoom out** select the magnifying glass then hold down **SHIFT** and left click on the screen.



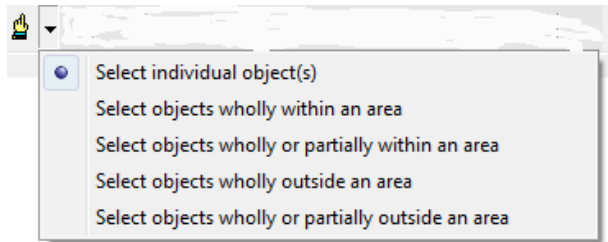
The explanation mark with the cross through it when clicked will fit the entire farm back to the size of the screen . ie: Revert to original view.



The pan tool when selected allows you to view the area of the farm you want to by grabbing the screen and dragging it in the direction that you desire.



The select tool is required when you would like to move, view and edit details or delete an item on the map. (If the item is not selected you are not able to edit it). There is also a dropdown option which allows for flexibility when selecting items.

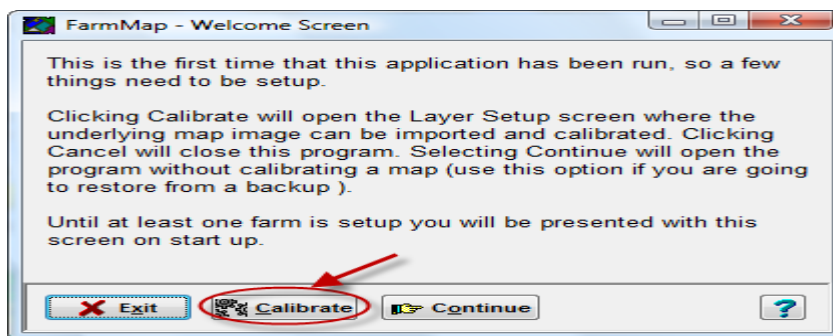


The trash can allows you to delete items that are selected.

4 Calibrating your Map Image

When you open FarmMap for the first time a pop up menu will appear.

Click on Calibrate and the calibrate screen will appear.



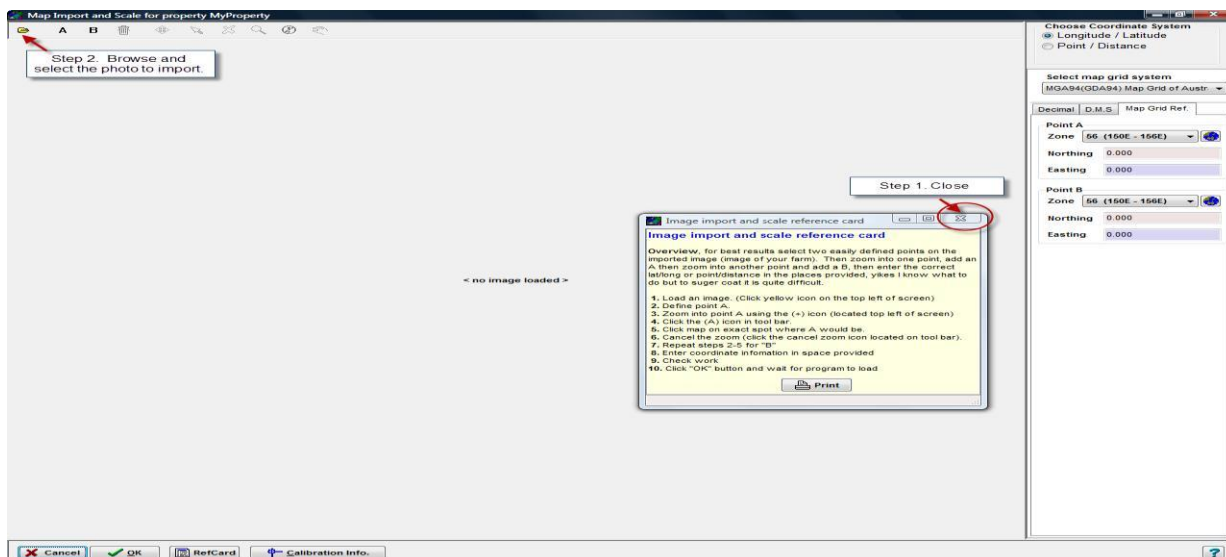
Step 1. Close the image import and scale reference card (as illustrated over page.)



Step 2. To import your map image go to the top left-hand side of the screen and click on the yellow folder (Browse). Browse for the location and image you wish to import and click open. Eg if your map image is on a CD select your CD/DVD drive and browse for your map image (as illustrated over page).



For large image (map) files on CD it is advisable to copy your image from your CD and save it to your computer first and then import from the location on your hard drive.



To calibrate an image, select two easily defined points on the imported image (image of your farm). Zoom into one point, add an A then zoom into another point and add a B, then enter the correct lat/long or point/distance in the area provided.



The more accurate the A & B points and co-ordinates, the more accurately your map will be calibrated.




Before following the steps to complete your calibration make sure your A & B points are in any of the following formats

- Degrees and decimals of a degree eg. 151.53445184 (**Decimal**)
- Degrees , Minutes and seconds eg. 151 degrees 28 minutes and 21.285948 seconds. (**D.M.S**)

The follow **cannot** be used in FarmMap

- Degrees and minutes and decimals of a minute **eg. 151 28.3547658 This example cannot be used** until you multiply the decimal part of the minute (.3547658) by 60. The example then becomes 151 degrees, 28 minutes and 21.285948 seconds and can be used in FarmMap.

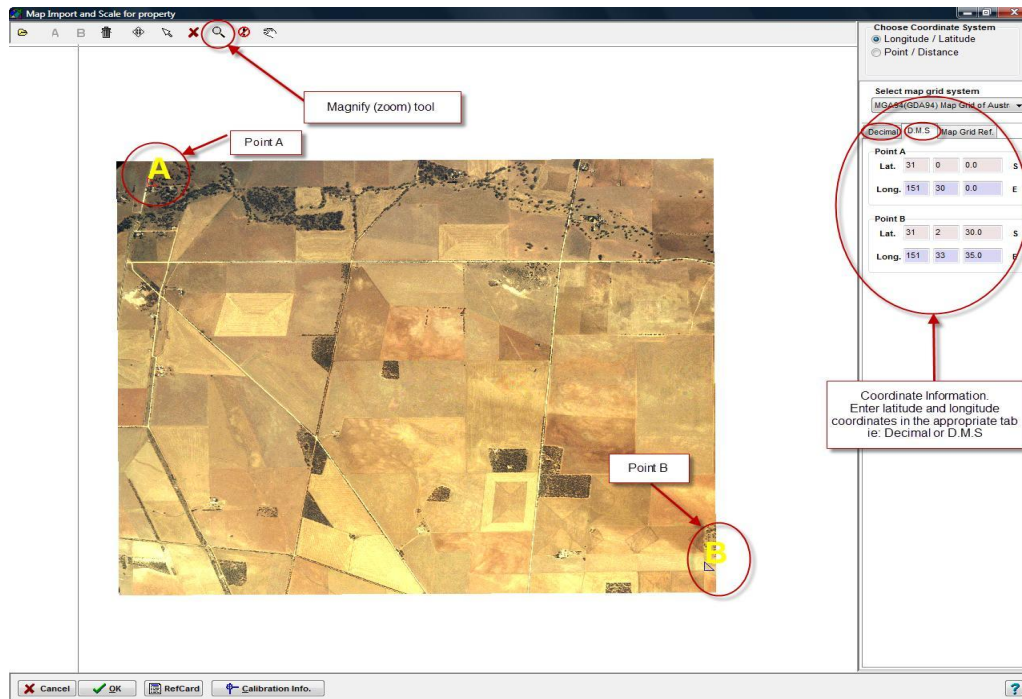
Follow the steps below to complete calibration.

1. Define point A.
2. Zoom into point A using the  icon (located top left of screen)
3. Click the (A) icon in tool bar.
4. Click map on exact spot where A would be.
5. Cancel the zoom (click the cancel zoom icon located on tool bar).
6. Repeat steps 2-5 for "B"
7. Select Decimal or D.M.S tab and enter coordinate information in space provided
8. Check work
9. Click "OK" button and wait for program to load.



If during the calibration process your map is to rotate any more than 5 degrees, please cancel – Check your A & B points along with your co-ordinates and phone our support line for assistance.

10. Before you proceed, it is **important to fully close down the FarmMap program** and click on the shortcut from your desktop to re open FarmMap. This will refresh all the FarmMap settings and in cases where the map appears to be distorted it will be restored to normal view once FarmMap has been closed and reopened.



Sample Calibration screen

4.1 Backing Up



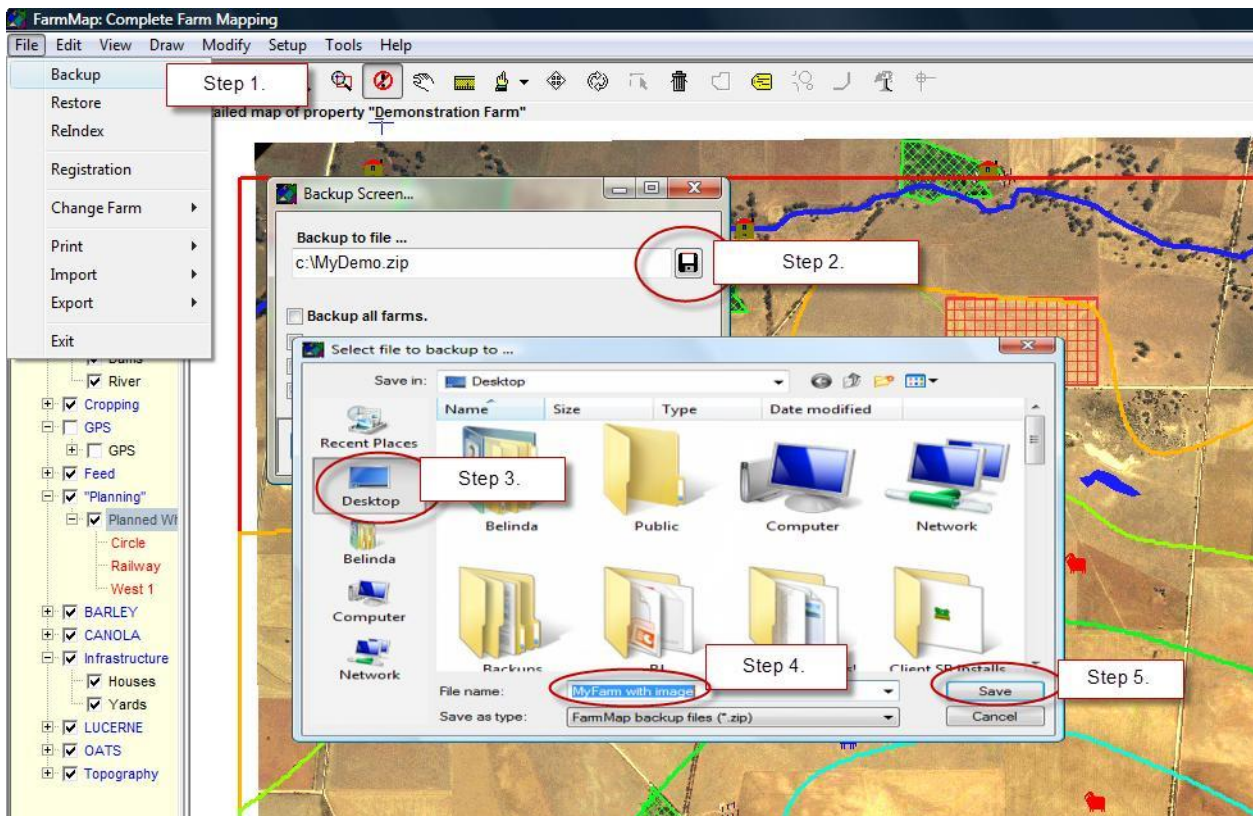
Backing up means creating a copy of your data. Ideally, you should backup everytime you exit the program, if you have made any changes. It is important to back up to an external device such as a disk, memory stick or external hard drive as well as your computer hard drive.



Backing up is fundamental to managing your FarmMap data.
It is a vital process and cannot be over-emphasised.

Once your map is calibrated this is a perfect time to do a backup. The initial backup will contain your map, where as any backups done after can just contain the layers not the map image. This will cut down on the size of the backup file.

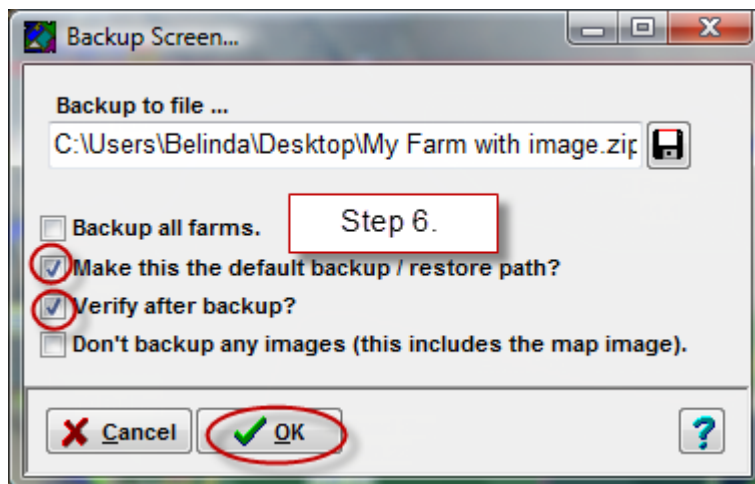
The following illustrates how to backup your map and data for the first time after calibration.



- Step 1. Click on File > Backup menu option.
- Step 2. Click browse (the disc icon)
- Step 3. Specify the location of your backup. Eg I have chosen "desktop" for this example
- Step 4. For this **first backup only**, rename your backup (eg. My Farm with image – as pictured.)
- Step 5. Click Save

Step 6. Place a tick in the boxes as pictured and click OK

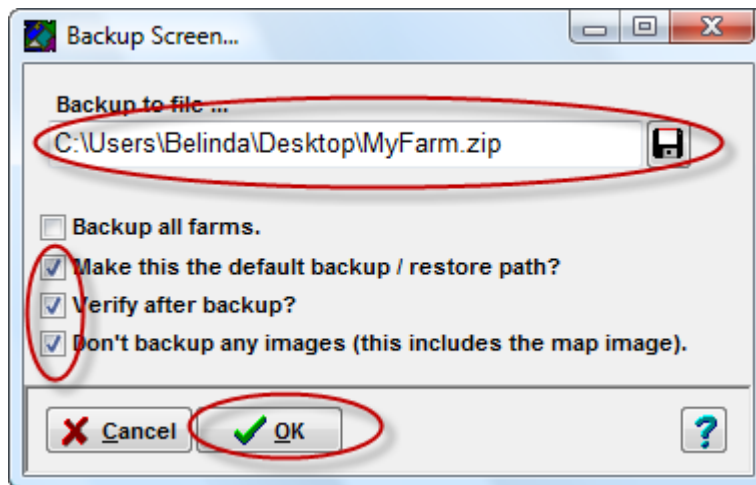
Note: If you have more than one map select the "Backup all farms" option.



FarmMap will now proceed with backing up and will ask you to verify.



For all subsequent backups please select the following options.



You will note that the end of the file name will now revert back to MyFarm.zip (as pictured above)

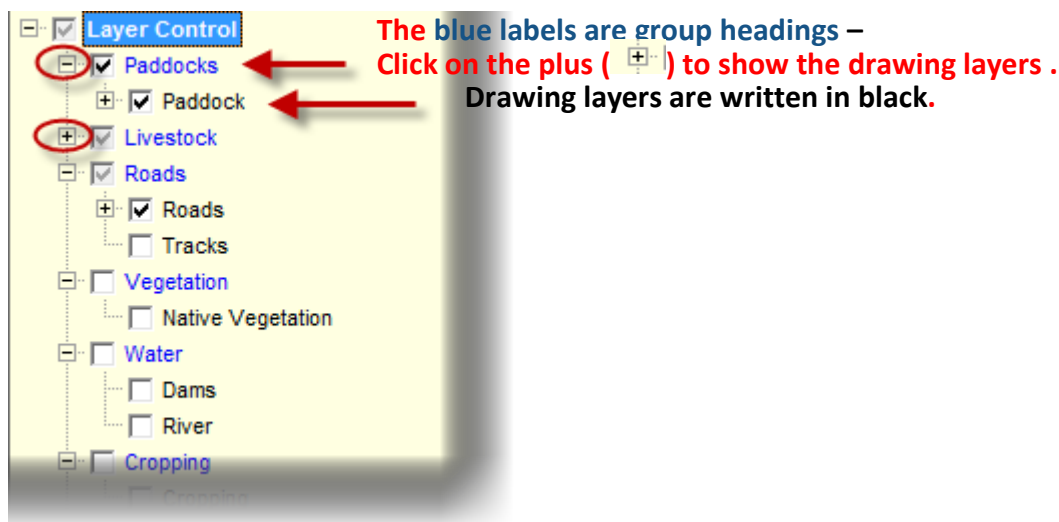
Tick the option "Don't backup any images."

You may also tick backup all farms if your have more than one

Clicking OK will now create a separate backup which does not include your map image.

You can backup to an external device by clicking on the browse (disc icon) and selecting the desired drive and location and repeat process.

4.2 Understanding the Layer Control



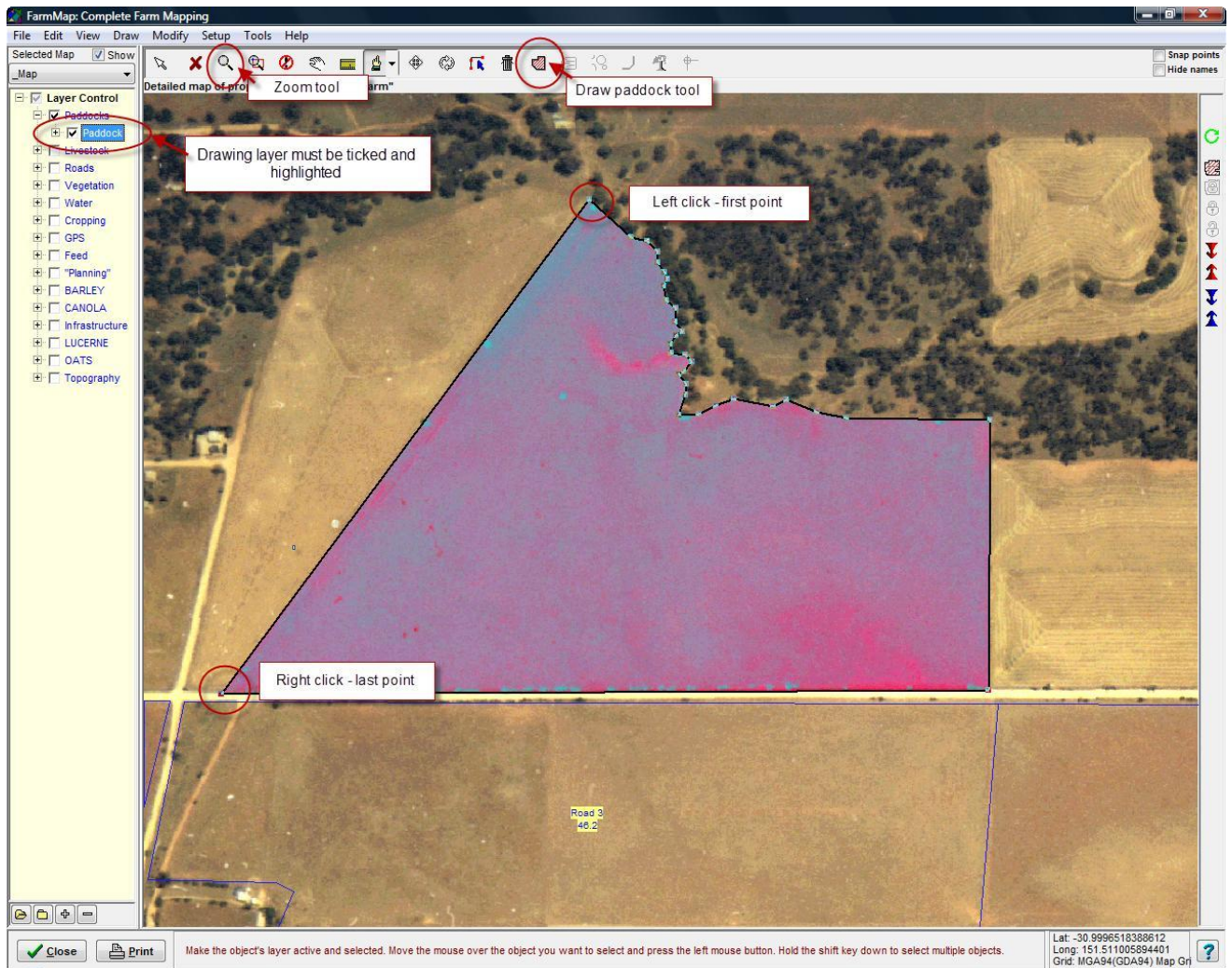
A tick placed in the box will activate (show) anything drawn on that layer.

Highlight by clicking the name on the drawing layer (black label). This activates the tools allowing you to draw or select object on the highlighted layer.



Use the tools at the top of the screen to draw, measure, move objects etc. on the highlighted drawing layer.

5 Drawing a Paddock



Follow the steps below and the example above to draw a paddock

1. Left click on the paddock label (black drawing layer), make sure paddock label is highlighted blue as in the image above.
2. Zoom in to the area you wish to draw a paddock by left clicking on the magnify icon.
3. Left click on the "draw paddock" tool. (as pictured above)
4. Left click on the corner of the paddock and continue to left click around the boarder of the paddock until it is highlighted like the one above. Right click on the last point to finish the paddock. (as pictured above)
Note: You do not finish where you start, finish (right click) one point before the starting point.
5. Enter the paddock name and press OK.



For straight lines go from point to point, but for curves add as many points as required to create the desired curve.



If using a GPS please go to section 6 "Using the GPS layer" in this Quick Start Guide.



When adding paddocks that share a fence line use “Snap-to Points” and “Snap-to Lines”. When moving the cursor to draw the paddocks, the cursor will snap to another point and or line within the appropriate range. You can activate this tool by going to Setup, and select one or more of the Snap-To options. It is advisable to have the Snap- to settings on medium. If paddocks are separated by a laneway you may turn of the Snap-to tools.

5.1 Adding a layer



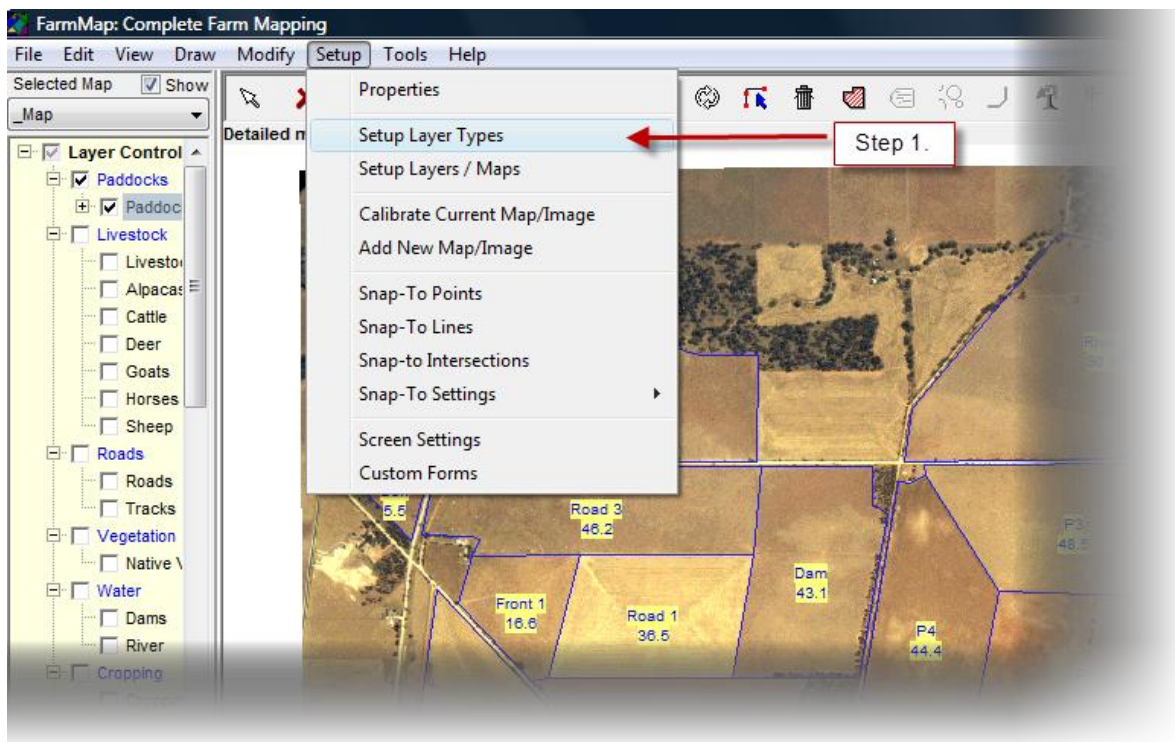
Add layers to create a more detailed layer control to suit your personal needs.

Note: You will not be able to see the layer in the layer control until you have also added a drawing layer (black label)

Follow the steps and pictures below to add a layer

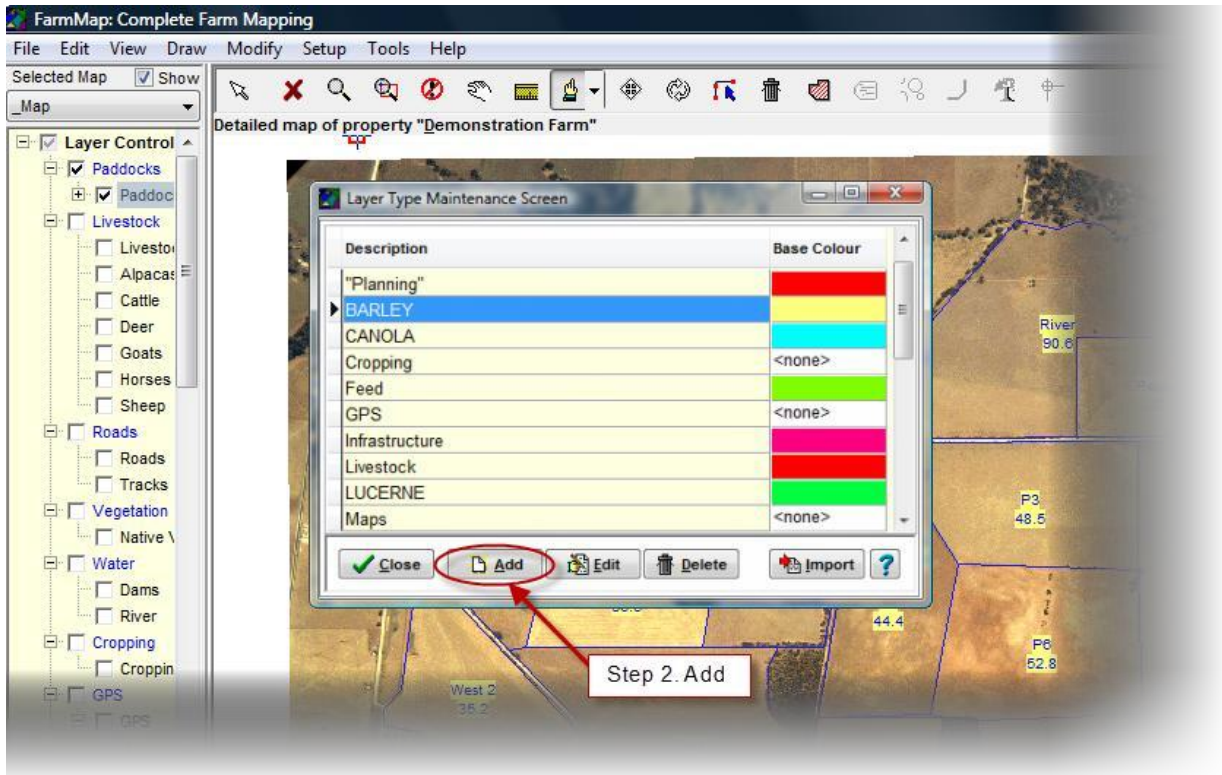


Step 1. . Go to Setup > Setup Layer Types

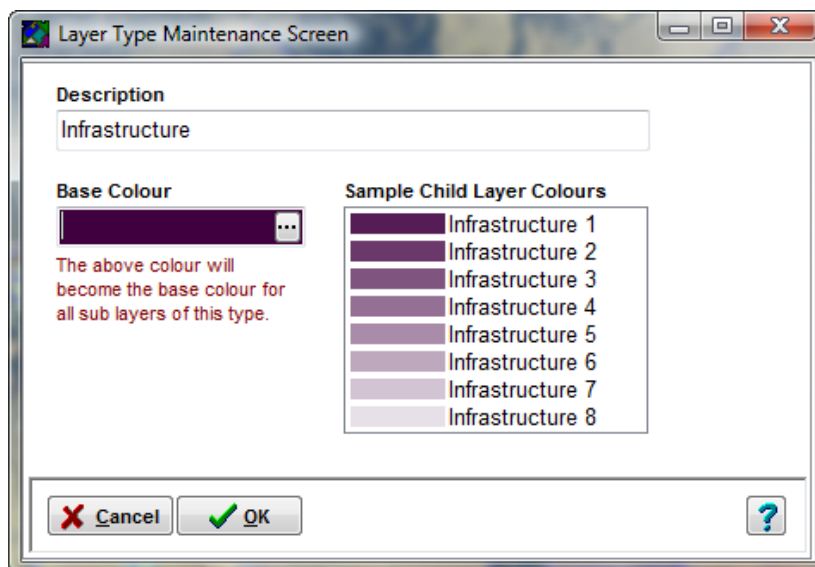




Step 2. Click Add button



Step 3. Fill out the Layer Maintenance Screen (Type Description and select a base colour and click OK



Sample – Adding an infrastructure layer

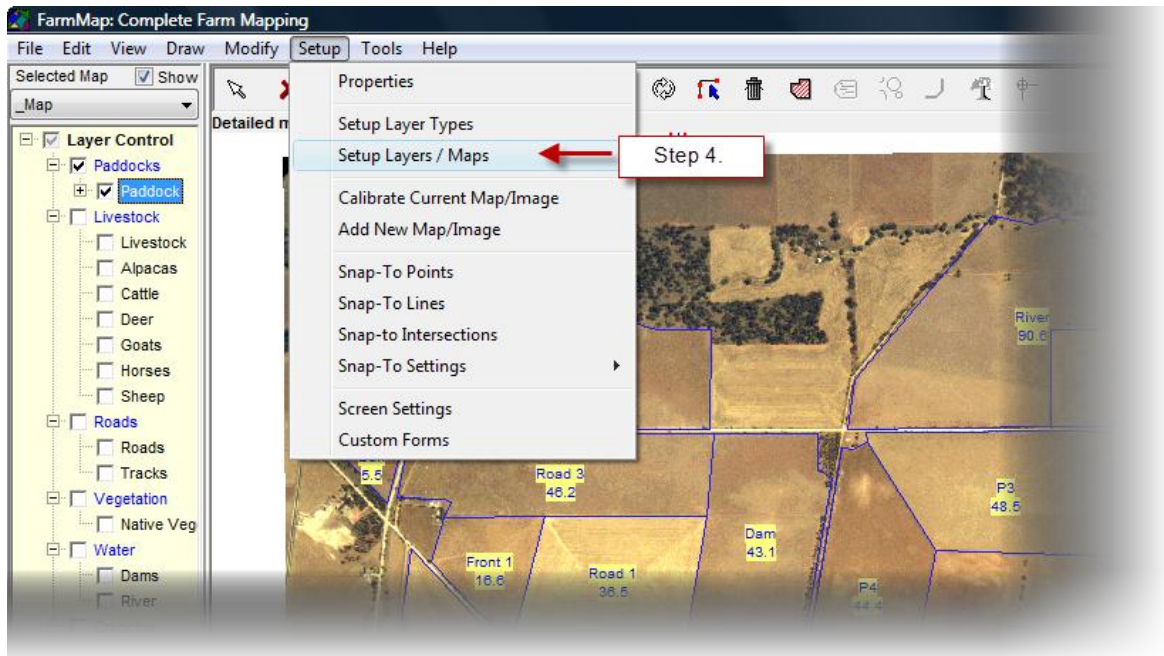


This Layer will not appear on the left hand side until you add a drawing layer (sub layer) to the new layer.

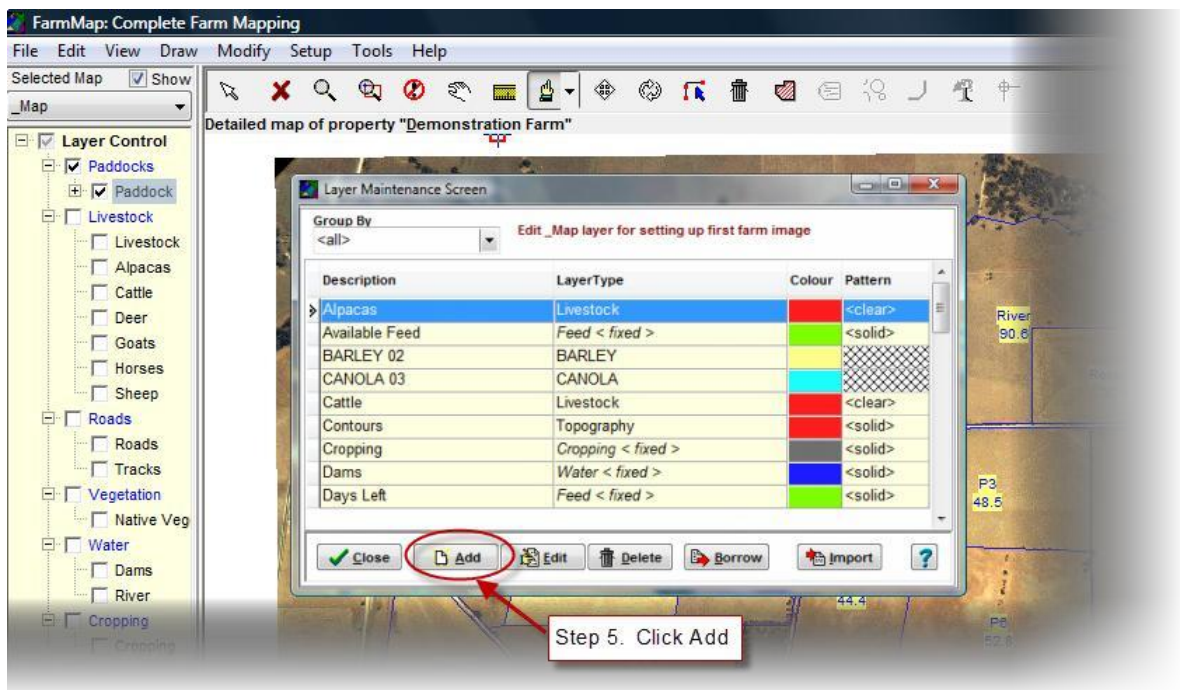
Adding the Drawing Layer (sub layer)



Step 4. Go to **Setup > Setup Layers/Maps**



Step 5. Click **Add** button





Step 6. Fill out the Layer Maintenance Screen.

Layer Maintenance Screen

Description: Yards

Layer Type: Infrastructure

Base Pattern: Solid

Base Colour: Infrastructure 1

Line Width: 1

Buttons: Cancel, OK, Click OK, ?

Sample adding Yards (drawing layer) to the Infrastructure Layer

Layer Maintenance Screen

Group By: <all>

Edit _Map layer for setting up first farm image

Description	LayerType	Colour	Pattern
Planned Wheat 2004	"Planning"		
Required Feed	Feed < fixed >		<solid>
River	Water		<solid>
Roads	Roads < fixed >		<solid>
Sheep	Livestock		<clear>
Thermatic	Maps	<none>	<solid>
Tracks	Roads		<solid>
Yards	Infrastructure		<clear>
_Map	Maps < fixed >		<solid>

Buttons: Close, Add, Edit, Delete, Borrow, Import, ?

Click on Close to complete the add a layer setup

You will now be able to see the heading (infrastructure) and the drawing layer (Yards) in the layer control on the left hand side.

If you need to add more drawing layers to Infrastructure such as Houses and Sheds, simply click on **Setup > Setup Layers/Maps** and repeat steps 5 and 6.

5.2 Adding an Icon

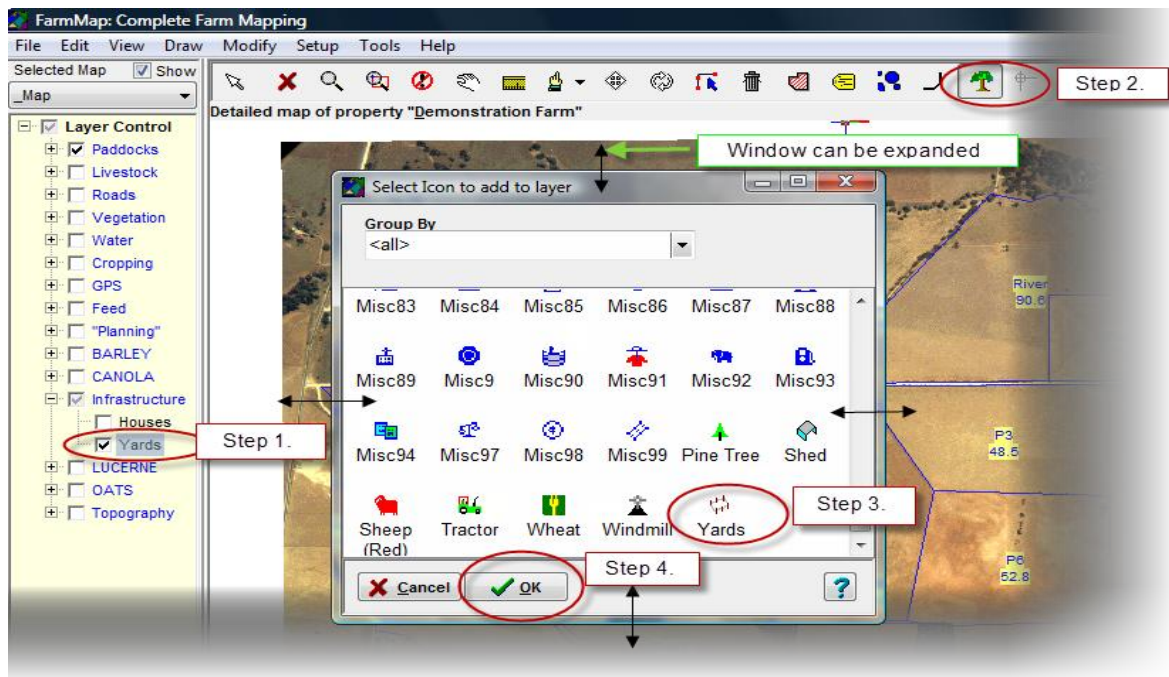


Icons can be added to your layers by clicking on the “Add an Icon” tool. The following example illustrates how to add an icon to the Infrastructure layer. FarmMap comes with a selection of icons, however you can create your own icons through **Tools > Icons**

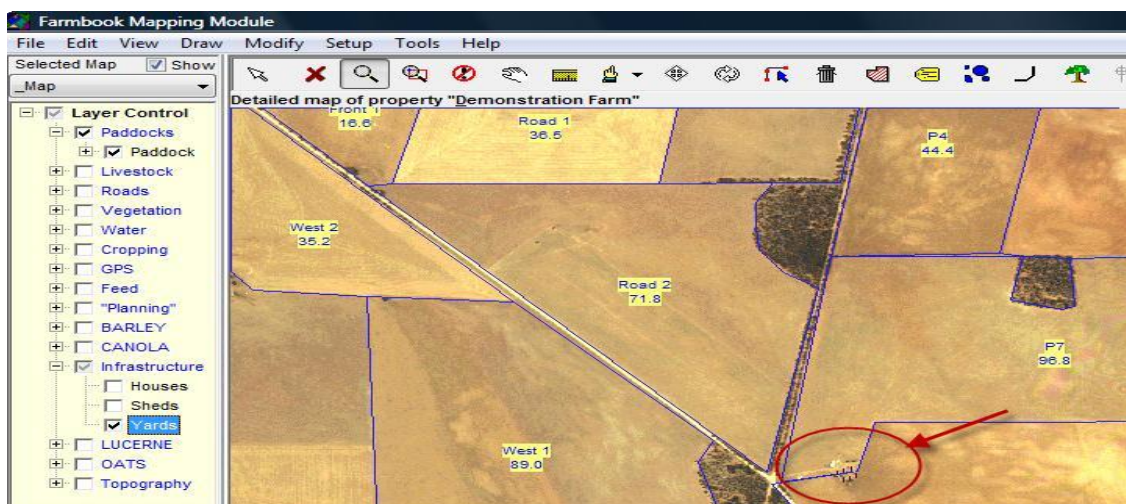


Have a go at creating your own icons by going to **Tools > Icons** and click on the **Add** button.

Follow the pictures and steps below to place an existing icon on the Yards layer..



- Step 1. Click to highlight the drawing layer (black label) you wish to add an icon to.
- Step 2. Click on **add icon tool** and the select icon box appears
- Step 3. Select the icon from the box
- Step 4. Click OK
- Step 5. Place the icon in the desired spot by left clicking (you can add this icon in as many places as needed by left clicking.)

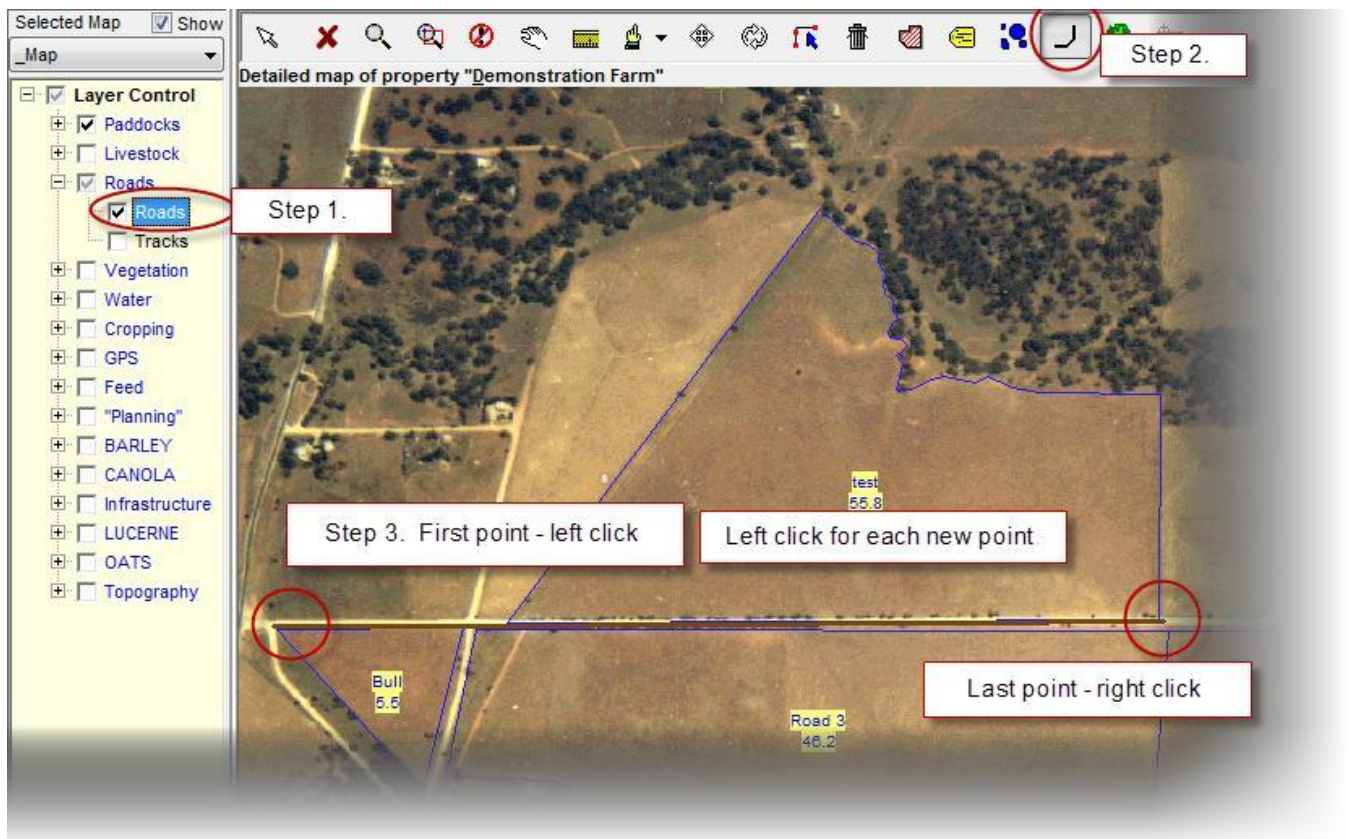


5.3 Drawing A Line.



Lines are used to draw roads, rivers, pipe line etc. If you are using a GPS please refer to section 6 “Using the GPS layer” to assist you.

The following pictures and steps illustrates how to draw a road.



Example - Drawing a road



Step 1. Select (highlight) Roads drawing layer (black label)

Step 2. Select the **Add Line** tool

Step 3. Left click to begin drawing the road and left click to add subsequent points.

Right click to end road.

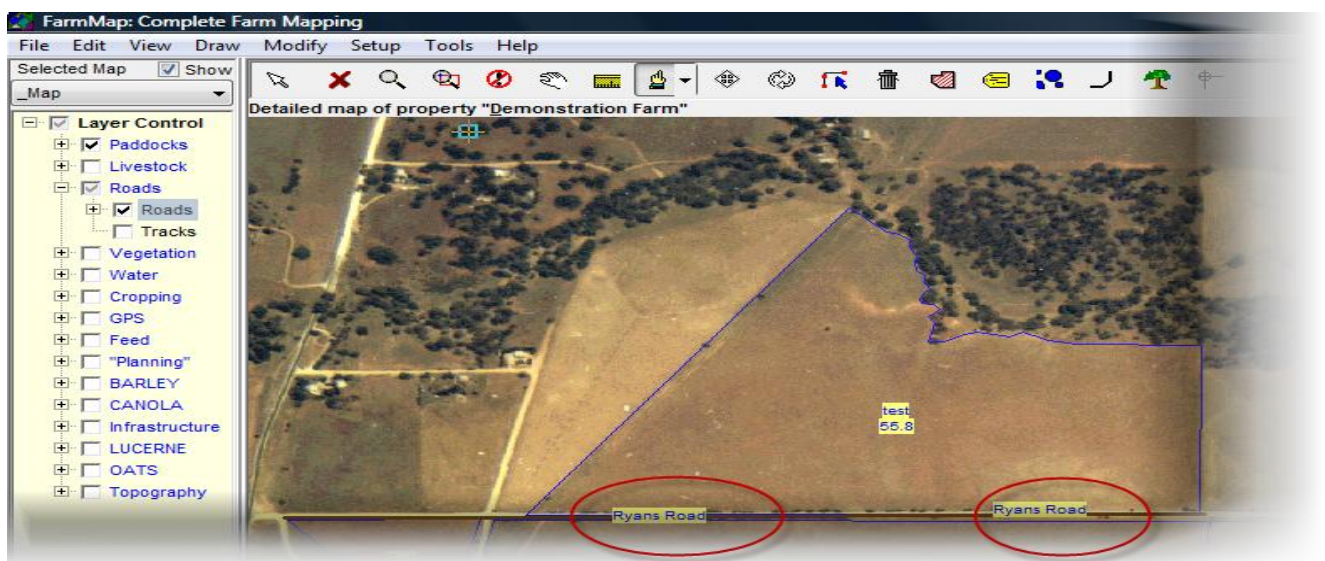
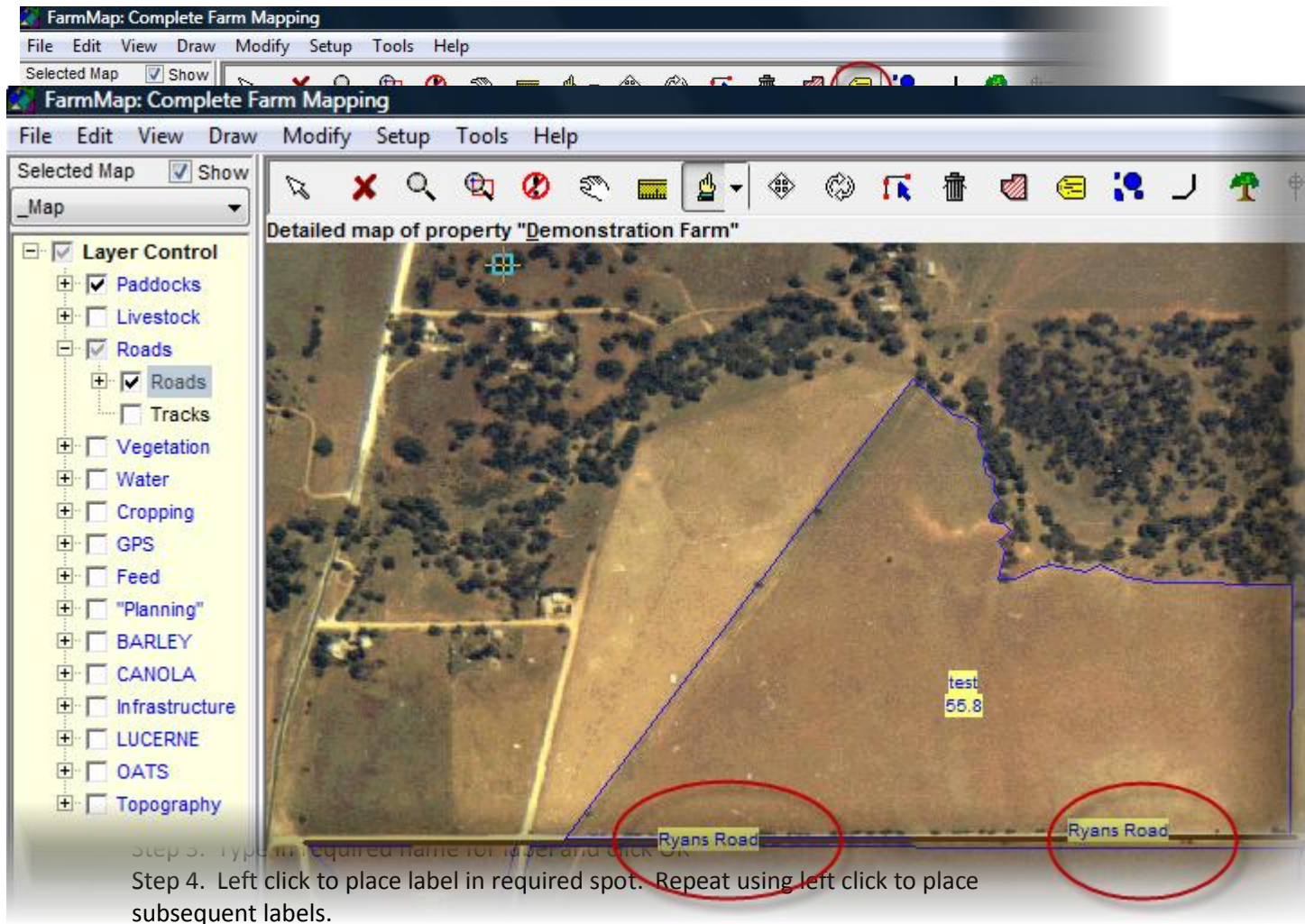


To obtain a curved road or line add more points. The closer the points are together the more you can curve the line.

5.4 Adding A Label



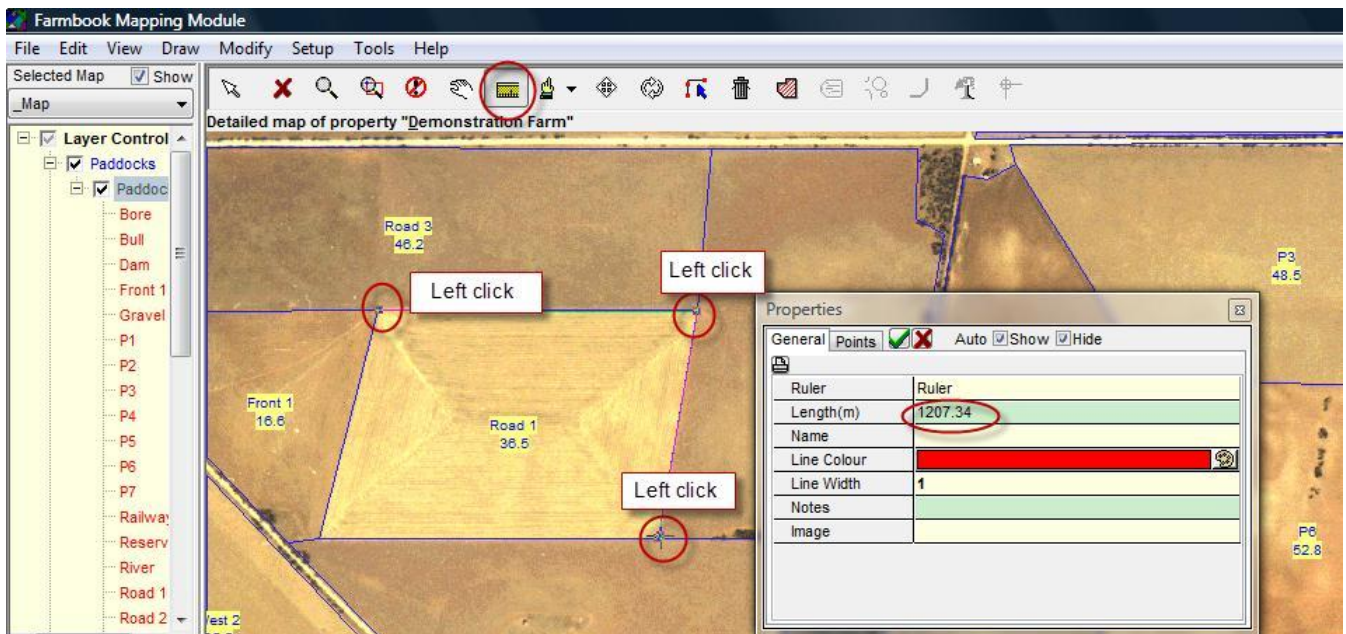
Labels can be added to any layer. The following example outlines adding a label to the road from previous example.



5.5 Measuring point to point



The measuring ruler is used to measure distances between two points. It can also measure non-straight line distances by clicking on each corner. The accumulated distance will show in the property box which pops up on the screen when you start measuring. This property box can be moved to any convenient place on the screen. Click and drag the box by the name bar at the top of the box. Right click the mouse to finish measuring.



- Step 1. Select the ruler icon.
- Step 2. Left click on the point where you want the measurement to start then continue to click along the line as you would when setting up a paddock.
- Step 3. Measurement will appear in the properties box as from the last left click.
- Step 4. Right click to exit this function.

6 Using the GPS Layer



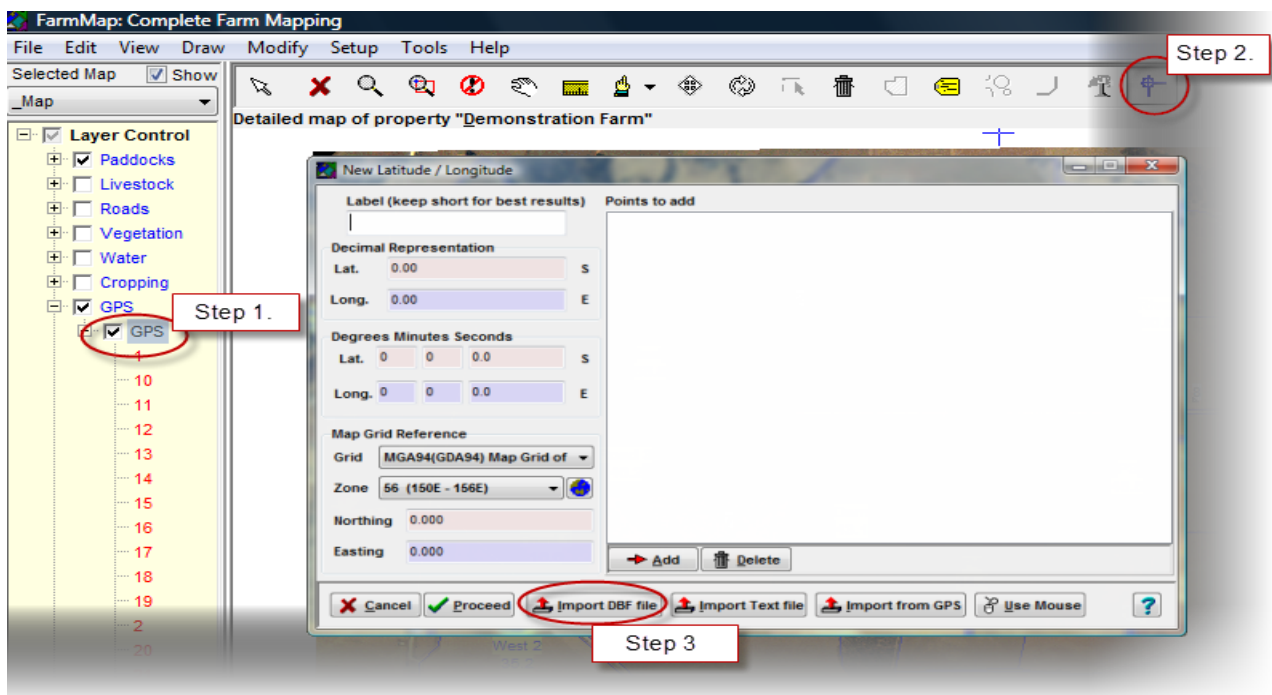
GPS points can be added to the GPS layer. This layer can then underlay any other layer allowing you to transfer those same points to the overlay. eg. Import GPS points recorded from corner posts of a paddock. You can then turn on the GPS layer and highlight your paddock layer and connect the dots(GPS points) to draw in paddocks. You could also use this to plot an irrigation line. It is recommended to use your snap-to tools for more accuracy when connecting the dots.

GPS layers can also be used to construct layers which have vertical information on them as well. These layers can be used to construct contour maps and thematic maps showing topographical relief.

GPS points may be imported into FarmMap from a file that has been saved in a DBF or Text file format. The text file format is a general import capability and can be used to import data from almost any Excel or word processor file or from a NMEA file downloaded from your GPS through the GPS Utility (GPSU) freeware program which is included with your Practical Systems Installation CD.

6.1 Import GPS Points from a DBF File

The following pictures and steps illustrates importing GPS points from a DBF file and then drawing an enclosed area using the paddock/enclosed area tool.



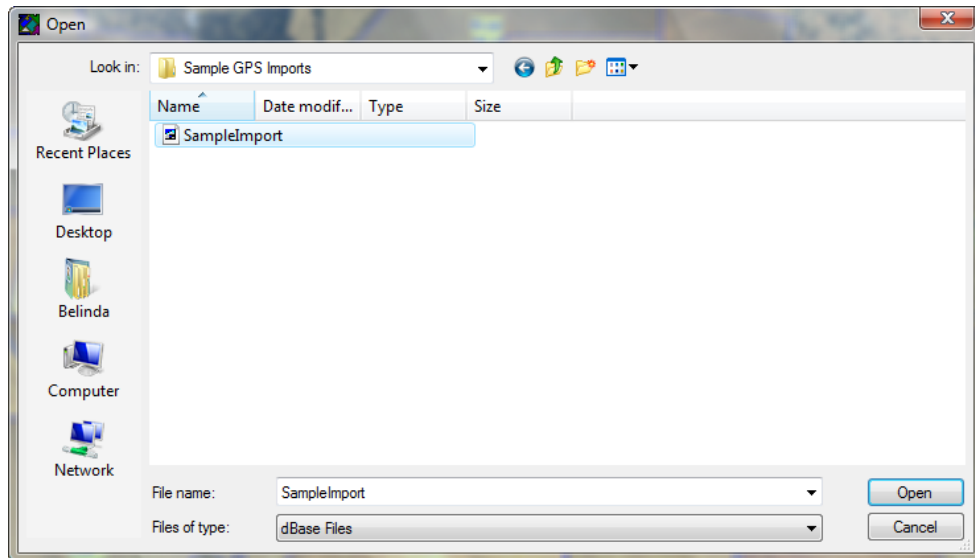
(see over page for steps)



- Step 1. Select GPS drawing layer (black label)
- Step 2. Select GPS tool from tool bar.
- Step 3. Click GPS option eg. Import DBF file

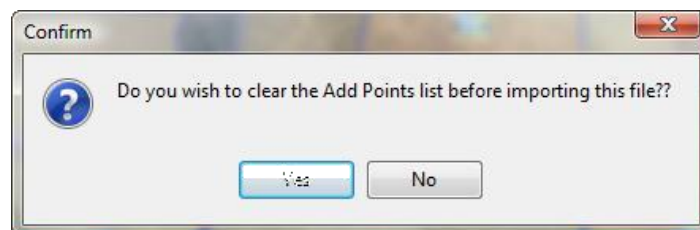


Note: There are various other options available eg. import direct from GPS. You can also add points in manually by clicking on the add button or using your mouse to plot the points on your map.

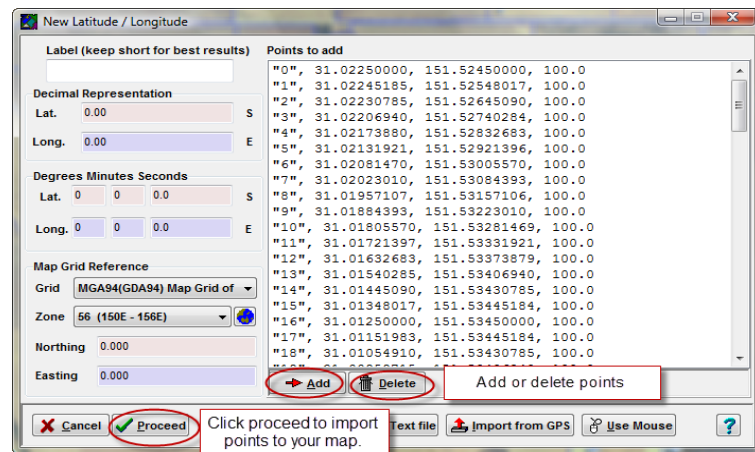


Step 4. Browse to find GPS file and click Open.

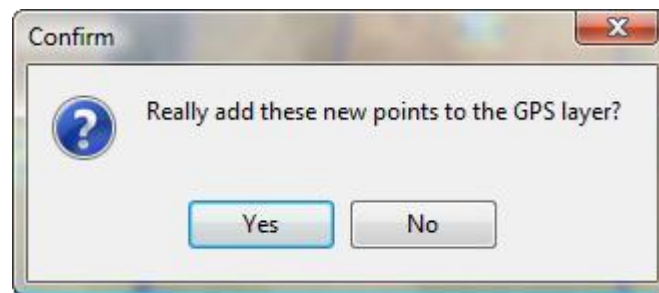
Note: There is a sample GPS import in FarmMap/Sample GPS Imports/SampleImport.



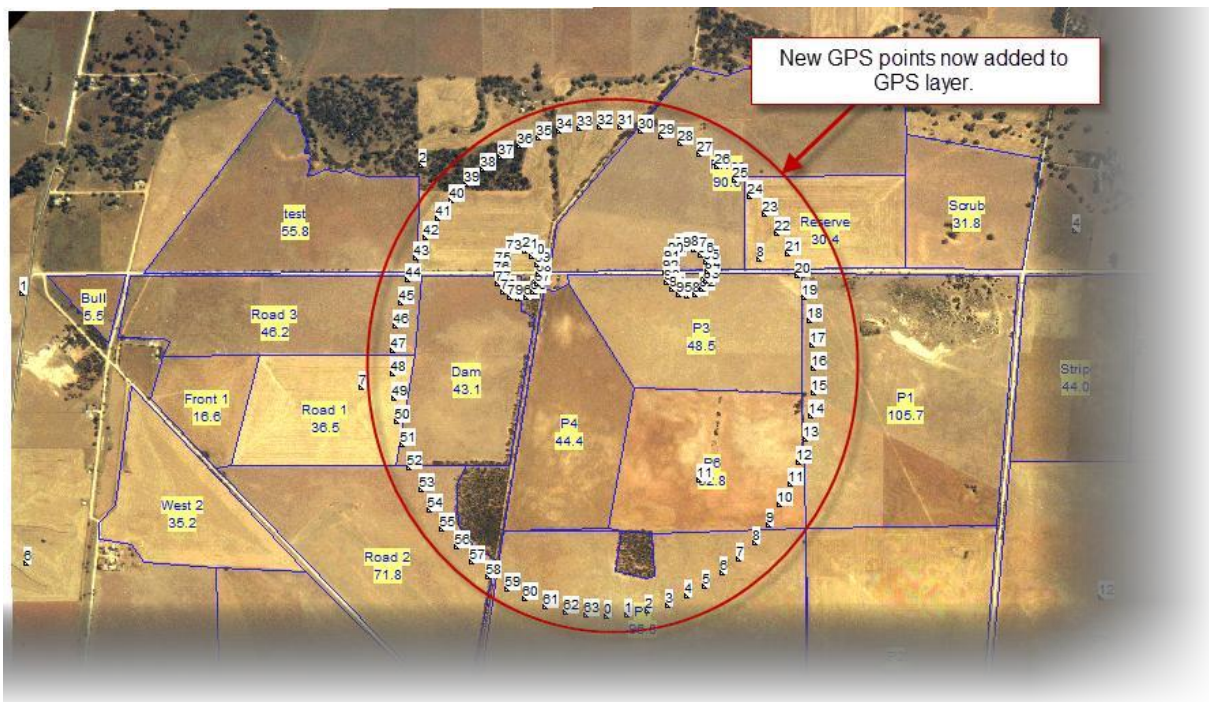
Step 5. Click “Yes” to clear any points that are already listed in your points window. Clicking “No” adds new points to existing points.



Step 6. Add or Delete points if desired and click Proceed to place points on your map.



Step 7. Confirm by clicking Yes or click No to go back.



Sample GPS points imported onto map.



The GPS units can display position in three Latitude and Longitude ways:

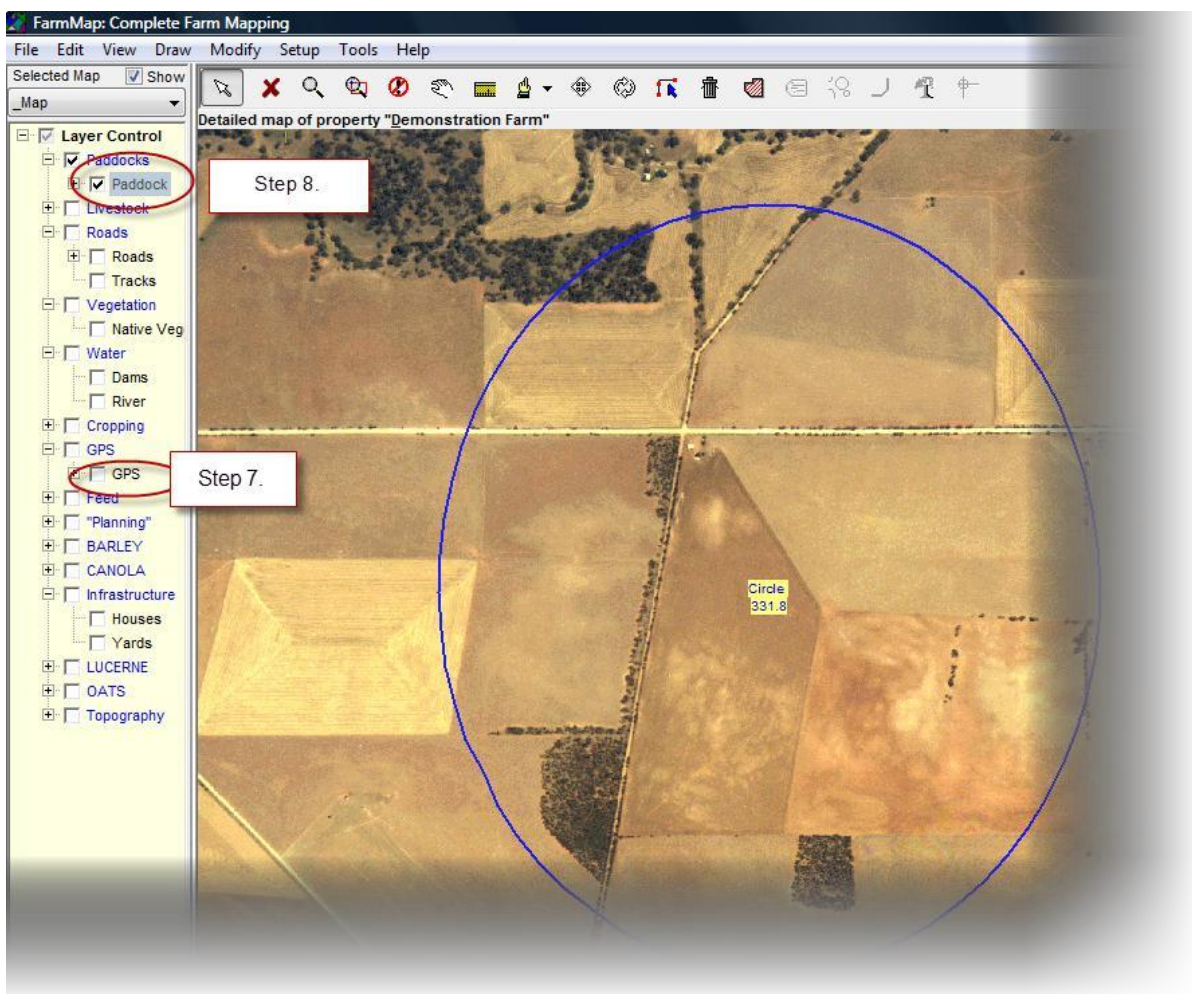
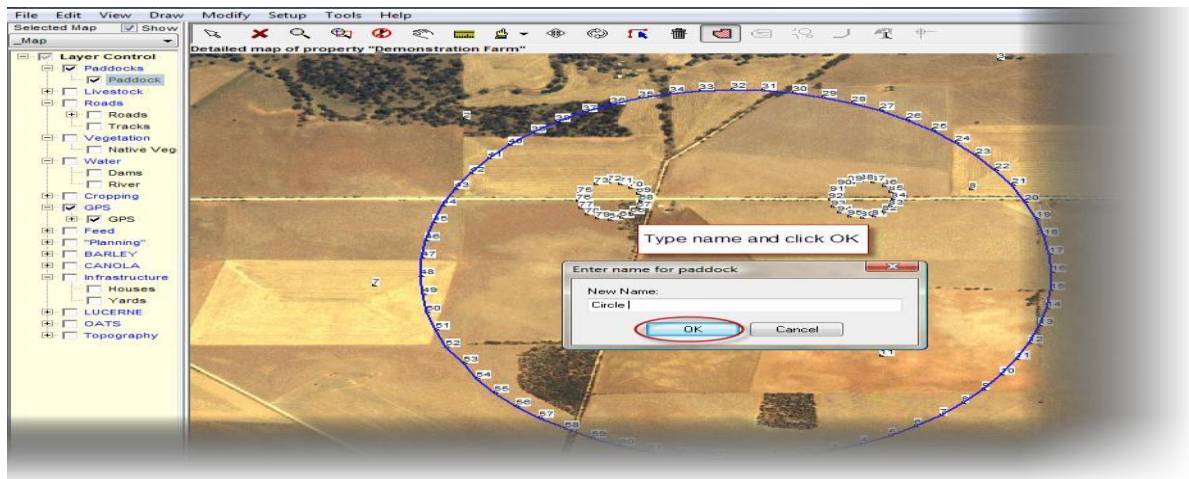
- Degrees and Decimals of a degree eg. 151.53445184 This can be used in FarmMap
- Degrees and Minutes and Decimals of a minute eg. 151 28.3547658 This cannot be used in FarmMap. To use this reading you have to multiply the decimal part of the minute (.3547658 from above) by 60 The example above then becomes 151 degrees, 28 minutes and 21.285948 seconds.
- Degrees, Minutes and Seconds eg 151 28 21.285948- This can be used in FarmMap.

6.2 Using the sample GPS points to draw an enclosed area.

Follow the pictures and steps below



- Step 1. Keep the GPS drawing layer ticked
- Step 2. Select (highlight) the Paddock layer (black label)
- Step 3. Tick on the Snap-To Points.
- Step 4. Select the “add paddock/enclosed” area tool.
- Step 5. Left click on the first point and work your way around the circle by left clicking at each point. Right click on the last point and label your enclosed area.
- Step 6. Enter name and click **OK**.



Step 7. Untick GPS layer.

Step 8. Tick Paddock layer to view new paddock



You can use this GPS layer to trace any shape on any layer, above or below the ground
eg. Underground pipe line.