

4 | Wizard

November 2026

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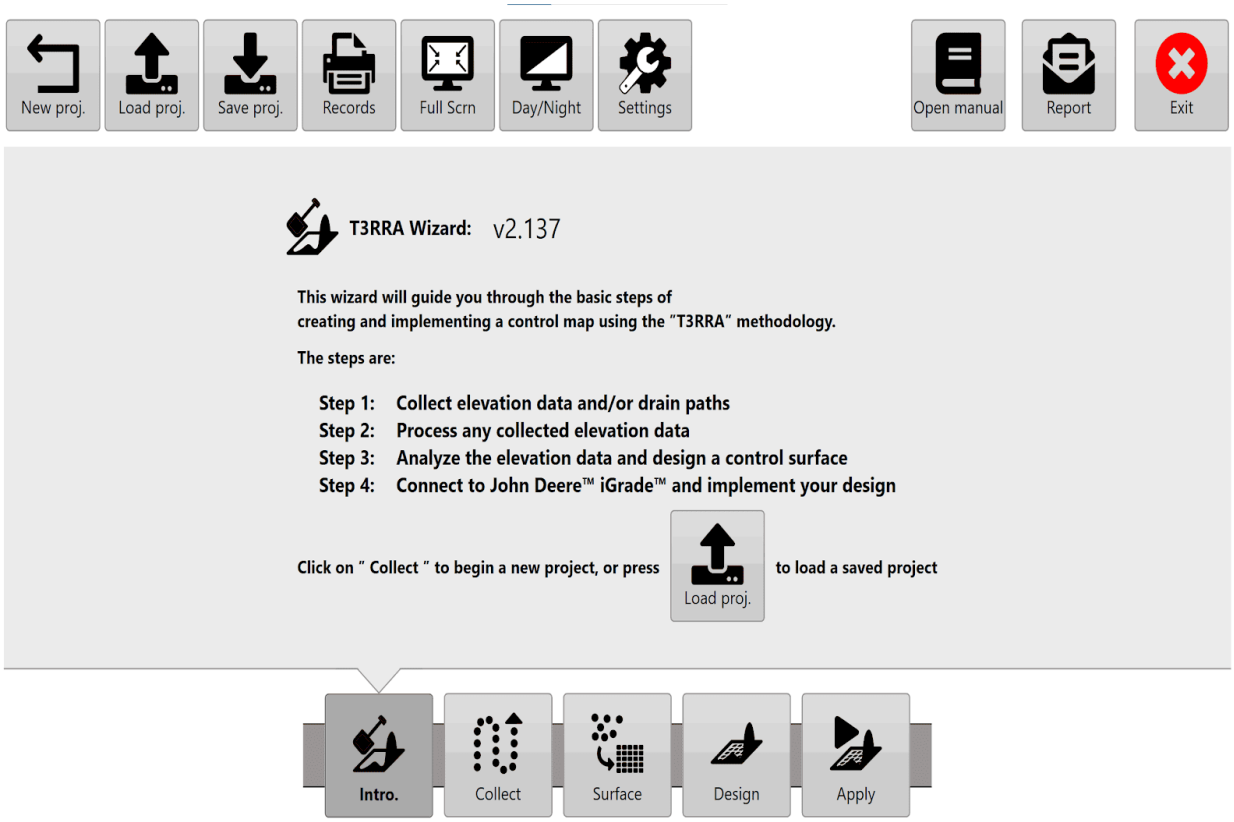
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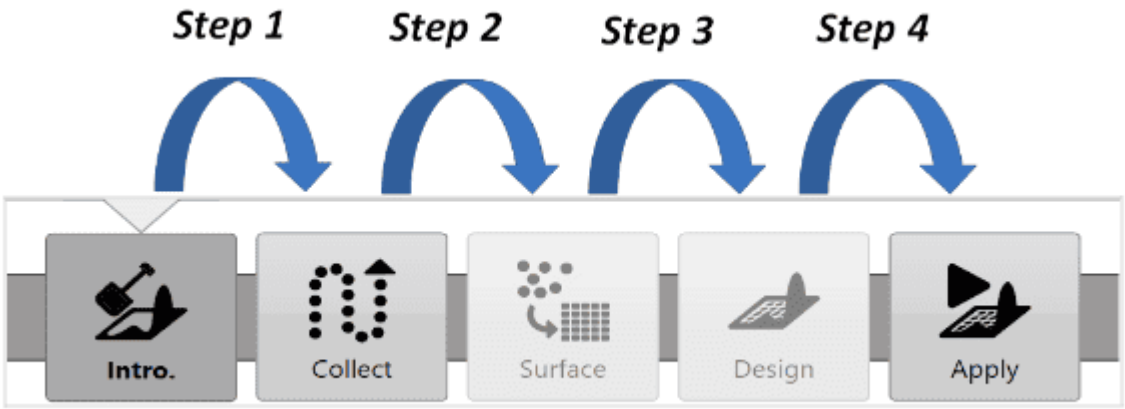
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4.1 | The T3RRA Wizard

The **Wizard** contains T3RRA software's primary tools for surveying, designing and implementing.



The wizard guides you through the 4 logical steps in the T3RRA software process.



To start a new project, press **New proj.** in the top left corner of any wizard page. This returns you to the **Main Page/New Project Page**.

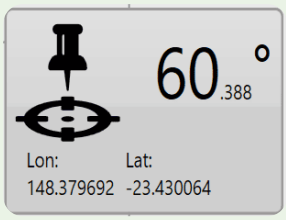
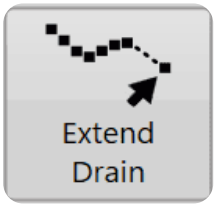
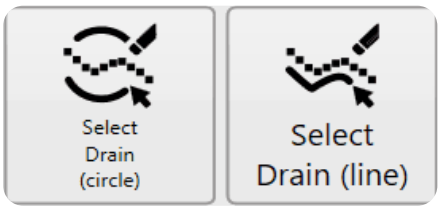


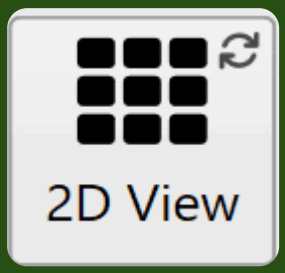
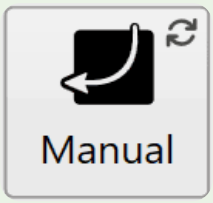
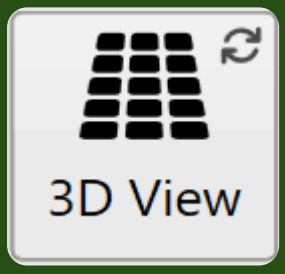
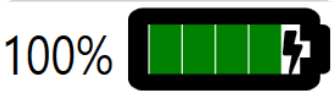
T3RRA Survey does not include the **Design** or **Apply** (Implementation) wizard steps. Manual sections about these steps do not apply to **T3RRA Survey**.

4.2 | Common tools found in the Wizard

Several buttons appear on multiple wizard pages. The reference below shows the tools and any limits on where they are available.

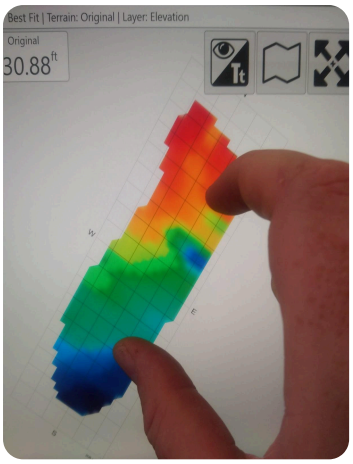
Tool and availability	Controls
Zoom Controls	
Choose Model/Layer	
Markers (limited to surveying and implementation)	

Tool and availability	Controls
GPS Controls (limited to surveying and implementation)	
Start, Stop, and Pause Survey	
Edit Drain (limited to surveying and surfacing)	
Extend Drain (limited to surveying and surfacing)	
Split Drain (limited to surveying and surfacing)	
Delete Points (limited to surveying and surfacing)	

Tool and availability	Controls
Tracking Options 2D View(limited to surveying and implementation) 	   
Tracking Options 3D View(limited to surveying and implementation) 	 
Screenshots	
Battery power indicator	

4.3 | Zoom Controls

There are several ways to zoom the map.

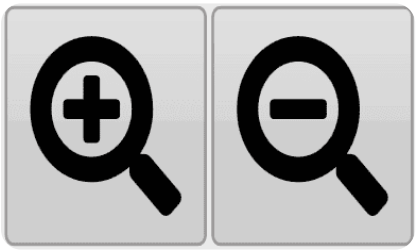


Pinch to zoom

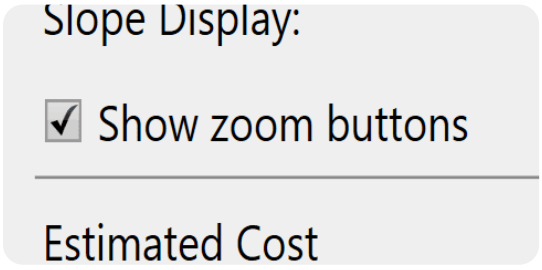
Use a two-finger pinch on the screen: move your fingers together to zoom out, or apart to zoom in.

Enable zoom buttons

Alternatively, use the zoom in and zoom out buttons on the bar at the top right.

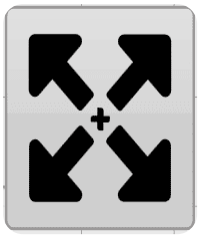


The zoom buttons are hidden by default. Under **Settings** > **Application**, select **Show zoom buttons** to enable them.



Show the entire surface grid

The **Zoom to full** button works independently of these zoom controls and does not need to be enabled. Press it to zoom in or out to the largest map view that shows the entire surface grid.



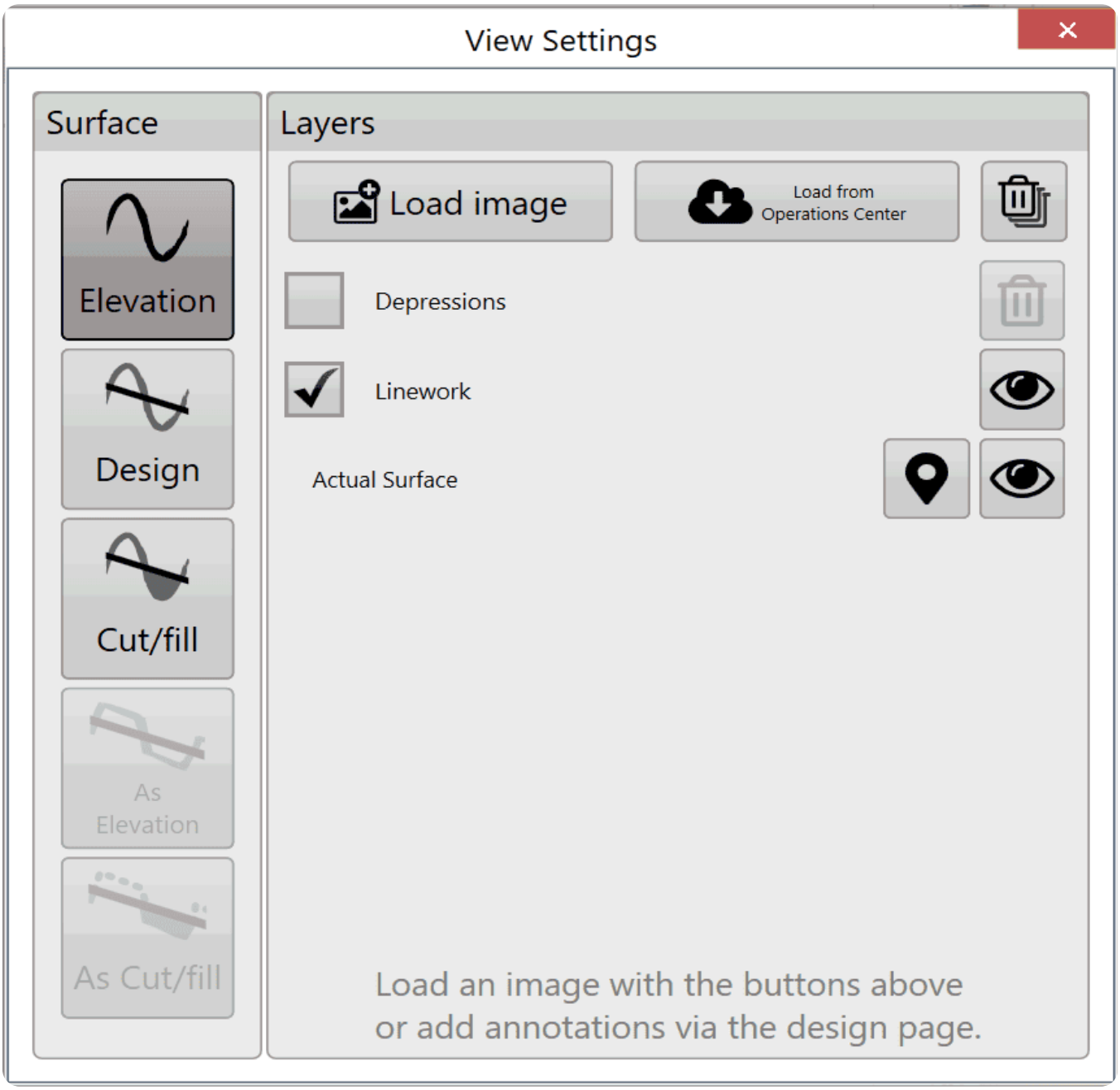
4.4 | Image Overlays

Image overlays imports geo-referenced image data into a field.



To access the image overlay, press the view button on the top of the screen.

Load image



Use **Load image** as the primary method of adding overlay images to the field. Press the button to open a file window, then select the desired file. Supported overlay image types are **.KML, .TIFF, .JPG, .JPEG, .PNG, .GIF, .BMP, .JSONGRID** and **.KMZ.**

Load image from JDOC

Download images from the **John Deere Operations Center** into the image overlay to compare previous data, such as yields, with current survey data.

Delete images



To delete an overlay image, uncheck the box next to it, then press the **delete images** button. This removes the layer from the available list. Images can only been deleted if they are not selected in check box and currently visible.

Transparency



To see the layers below an overlay image, check the box to the left of its layer, then press the transparency button on the right side.

Layers

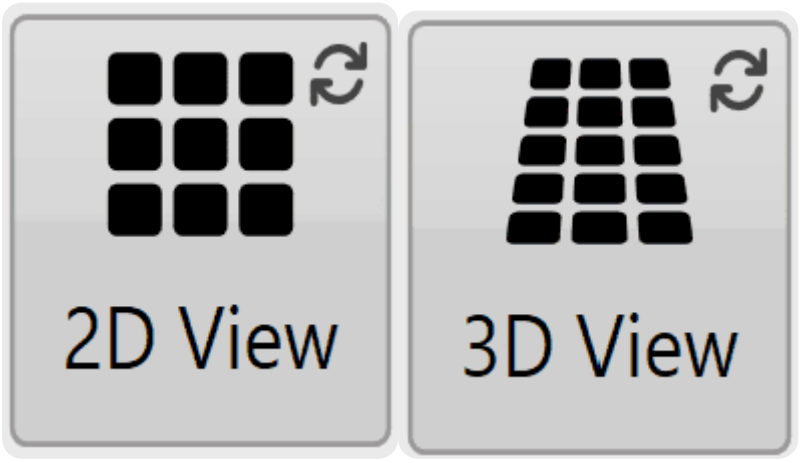
Press a layer to display it over the other layers.

4.5 | Choose Mode/Terrain/Layer

Mode

2D View displays the map as a 2D aerial view by default.

3D View shows terrain as small hills and valleys. Press the vertical scale magnifier shown below to exaggerate the hills and valleys, making them easier to identify. To change the focal point in 3D, quickly double tap a position.



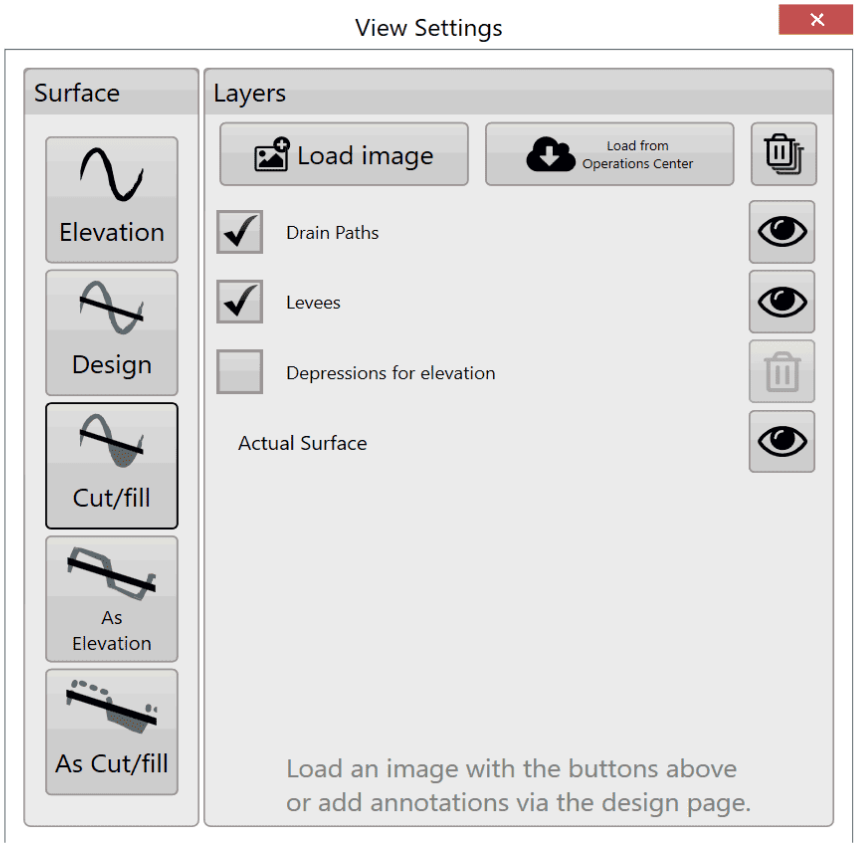
View



A map has several display options.

Surface

Surface selects the source of the map's 3D topography and coloring. There are 6 options:



Elevation shows the original surface before any dirt is moved. Its Red to Blue gradient shows low areas in Red and high areas in Blue.

Design shows the applied design: the surface you are trying to reach at the end of the dirt moving process. It uses the same color scheme as Elevation.

Cut/Fill shows where the design will take dirt from and where it will put dirt. The layer's coloring depends on the current Cut/Fill color scheme in Settings > Application.

As applied shows changes as they occur, providing a real-time view of work progress. It uses the same color scheme as Elevation.

> ⚠ This terrain and As Cut/Fill is only available if **As Applied** mapping has been enabled in the machine tab of **Settings**.

As Cut/Fill shows where the design will take dirt from and where it will put dirt. The layer's coloring depends on the current Cut/Fill color scheme in Settings > Application.

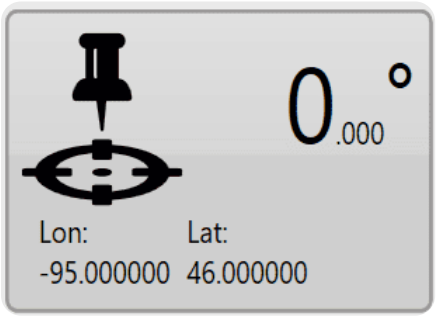
Layers

Turn defined layers on or off here, including the current surface described above, depressions, drains, linework, and loaded overlays such as KML. The buttons at the top load and clear layers. Each layer has a transparency toggle button beside it; click that button to change the layer's transparency.



> ⓘ **NOTE: The depressions layer is not shown if the project only has drains (and no elevation surface).**

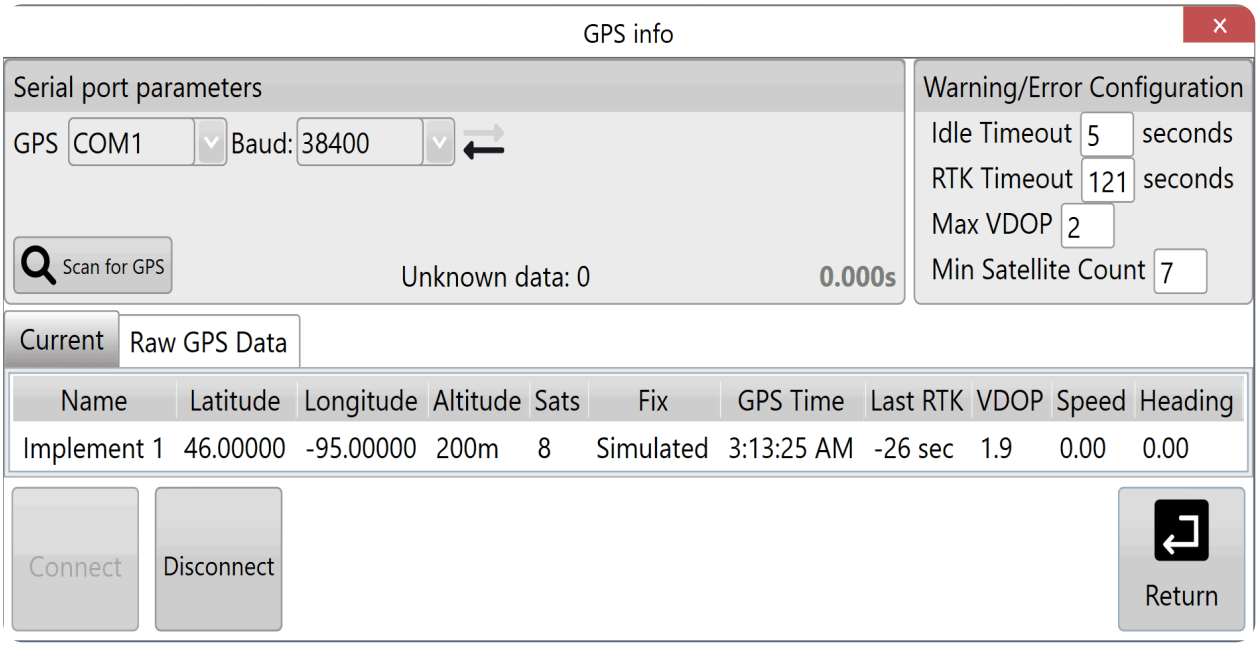
4.6 | GPS Data



The GPS information button is in the lower-right corner of the screen. It shows your current latitude, longitude and heading.

> ⓘ TIP: Right-click (press and hold) the GPS information button to open a context menu with an option to display coordinates in UTM format.

Press the GPS information button to open the **GPS Info** window for more detailed GPS information.

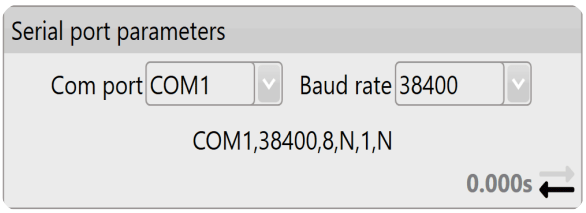


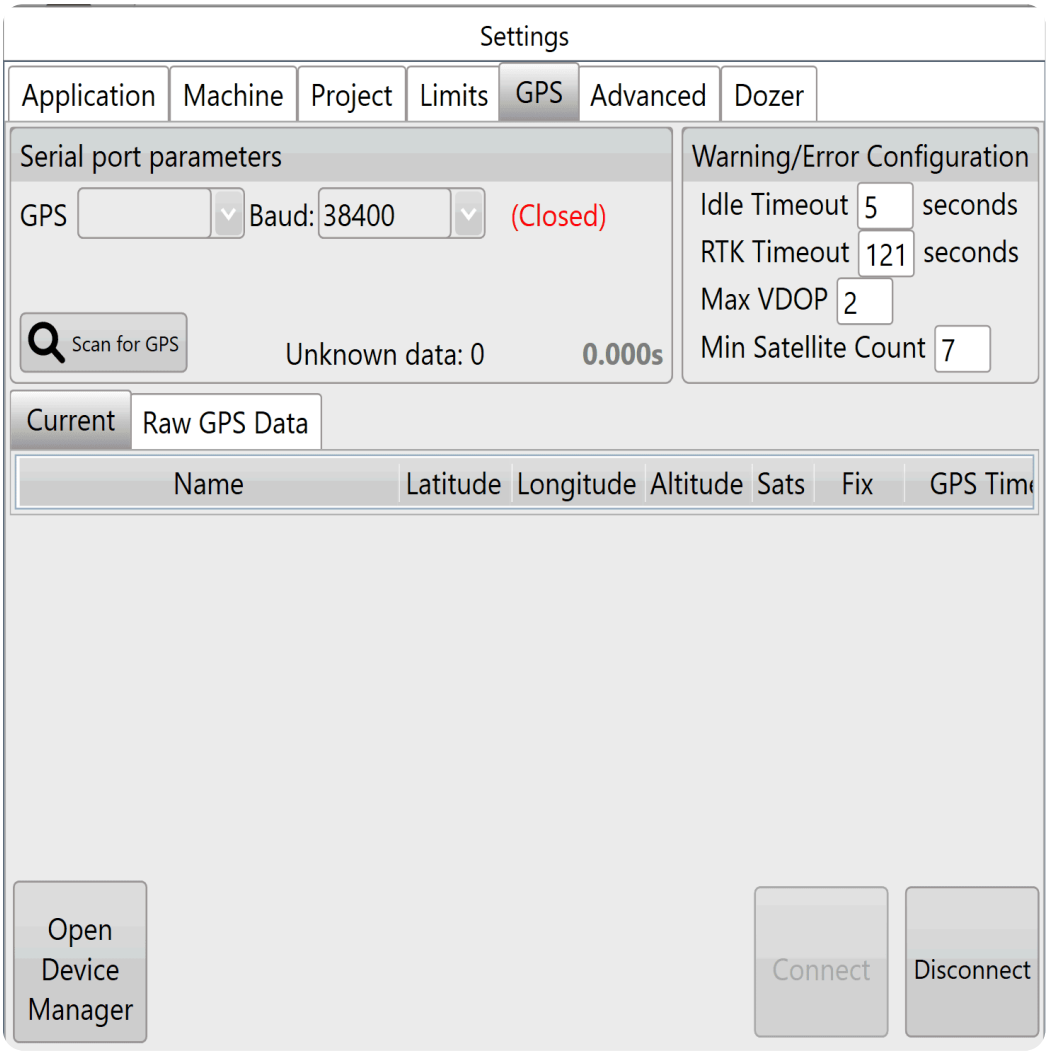
The GPS Info window contains the following information:

- Serial port parameters : displays the current settings for the com port and baud rate that is being used. There are flashing arrows which indicate that the software is sending and receiving information.
- Warning Thresholds : used to set limits for certain parameters. When these thresholds are being approached the borders of the screen will flash orange, once any of the thresholds have been exceeded or connection to GPS is cut the borders of the screen will flash red.
- Output : shows all the GPS information currently being received.

Serial port parameters

Com port: The adapter assigns the Com port #. The drop-down box lists all available com ports. Select the serial port physically connected by cable to the iGrade™ Application Controller. Windows Device Manager provides diagnostics for the current serial ports; you can open it using the button at the bottom left of **Settings > GPS**.

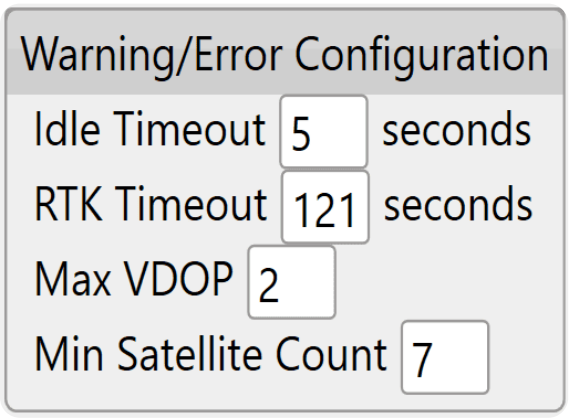




Baud rate: This is the speed of communication with iGrade™. It must match the iGrade™ settings, or T3RRA software cannot communicate with iGrade™. For iGrade v1, the recommended baud rate is 38400. For iGrade™ v2, the recommended baud rate is 115200, with **NMEA Message Type** set to "All".

Warning Thresholds

Idle timeout: An error warning appears if no GPS messages are received within this time period.

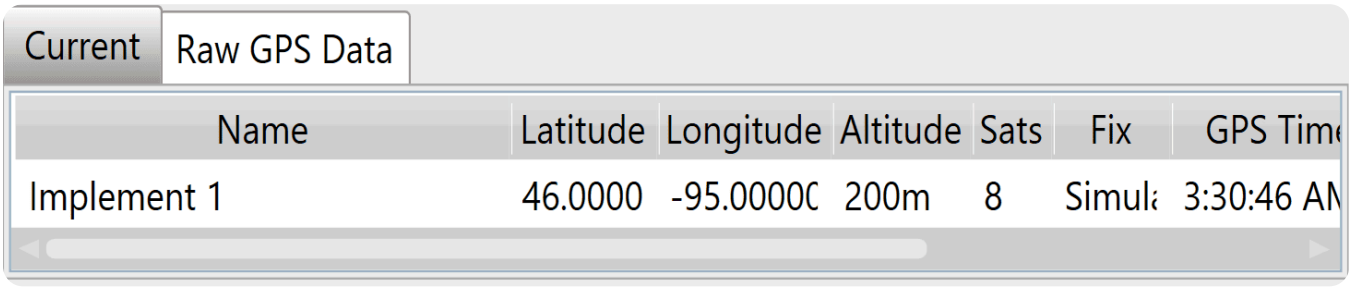


RTK Timeout: This monitors the time since the last good RTK correction packet. It should not normally be set above 10-20sec.

Max VDOP: Vertical Dilution of Precision measures altitude accuracy. Keep this value as low as possible for the most accurate implementation, but setting it lower than 2 may interrupt use of T3RRA software.

Min Satellite Count: Sets how few satellites the GPS needs to see before a warning appears.

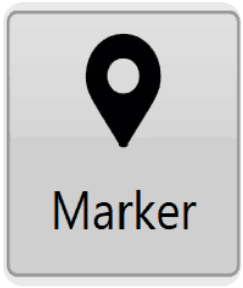
Output



Field	Meaning
Current & Raw GPS Data:	Current shows the receiver's current position data. Raw GPS Data shows all incoming messages.
Lat & Lon:	Your current location coordinates (latitude and longitude).
Altitude:	Your current height above sea level, displayed in the chosen measurement format.
Num Sats:	The number of satellites currently tracked by your GPS. It is linked to Min Satellite Count in Warning thresholds: an error appears if the count drops below that setting.
Fix:	The type of position solution calculated.
Time:	The current GPS time.
Last Correction:	The time since the last differential correction message from the base station. Keep it as low as possible for the most accurate readings. It is linked to RTK Timeout in Warning thresholds: an error appears if it exceeds that limit.
VDOP:	Vertical Dilution of Precision. An error appears if this number exceeds Max VDOP in warning thresholds.

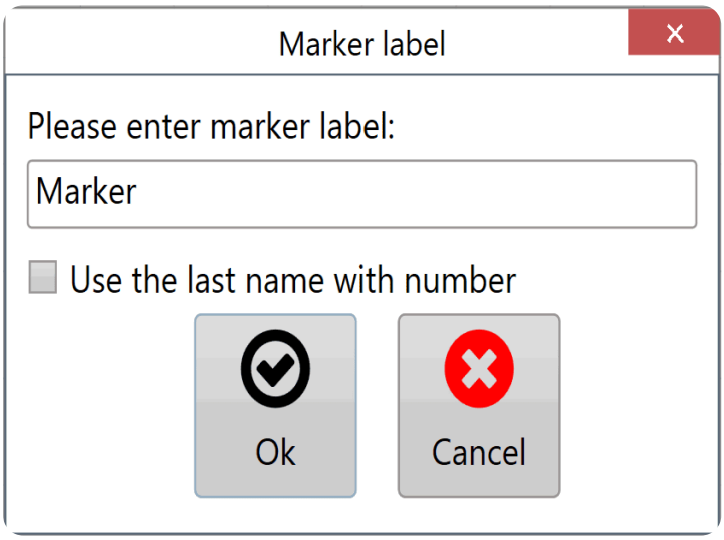
4.7 | Markers

Markers identify points of interest at user-selected locations on a design. A marker can also serve as a benchmark "control point" location. For instructions on using a marker as a Benchmark location, see **Set Zero using a marker** in this manual's Implementation section.

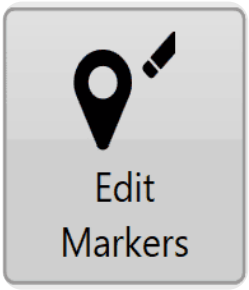


Use **Set marker** to place a marker on the map. Markers are always placed at the current location.

Creating a new marker opens a window where you can enter its name.

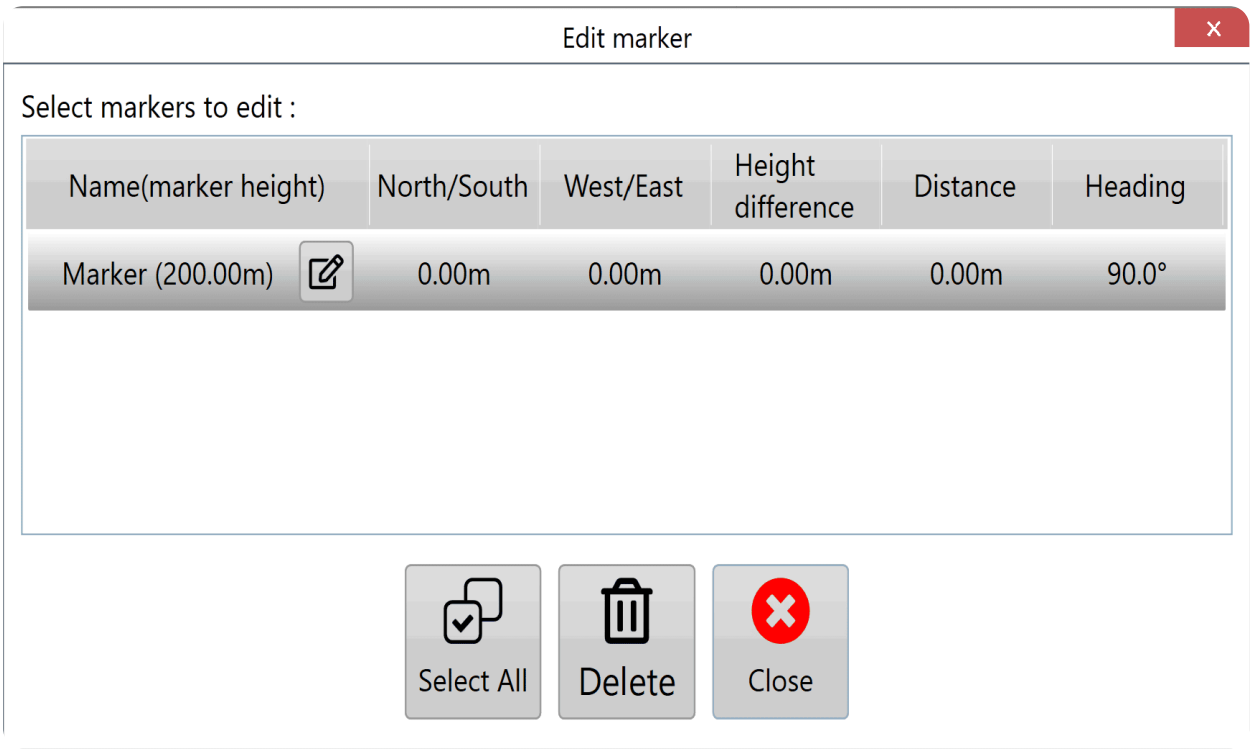


Edit Marker opens a window where you can select and edit any marker on the map.



The **Edit Marker** window displays information about each placed marker, including its heading, distance and height relative to your current position.

To rename a marker, press the button next to its name.



Use the buttons at the bottom of the window to select all markers, delete the currently selected markers, export the currently selected markers or close the window.

4.8 | Start, Pause and Stop controls

On the Surveying and Implementation screens, **Start**, **Pause**, and **Stop** control the beginning and ending of the relevant activities.



The buttons' functions vary with the activity.

Normal function

Start begins surveying data or implementing a design. It also starts logging path counts if enabled. The button's title reflects the action it will start.

Pause applies only to Surveying and lets you continue a path after moving around obstacles. For example, while surveying a drain, press Pause, move around the obstacle, then press Start. The system treats the drain at your new position as a continuation of the same drain.

Stop ends surveying the area or implementing a design. In Surveying, the next Start begins a separate area. For example, while surveying a drain, press Stop, move, then press Start. The system treats this as a new, separate drain.

Drain Surveying function

When the software is set to survey drains, the functions of Start, Pause, and Stop change slightly.

Start starts surveying a drain.

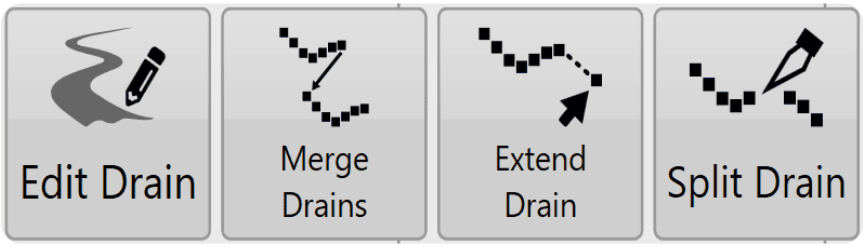
Stop ends the current drain survey. Pressing Start afterward starts a new drain.

Pause collection when the collecting vehicle cannot physically traverse a section of drain line.

4.9 | Drain Surveying specific edit controls

These tools are available in the **Collection** and **Surfacing** stages when drain survey points exist.

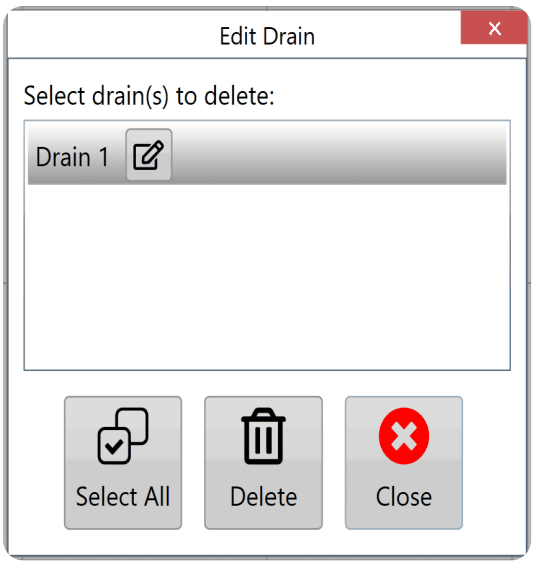
- Edit Drain
- Merge Drains
- Extend Drain
- Split Drain



Edit Drain



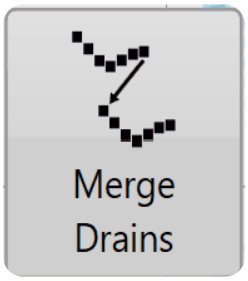
Use this button to edit complete drain paths in the project.

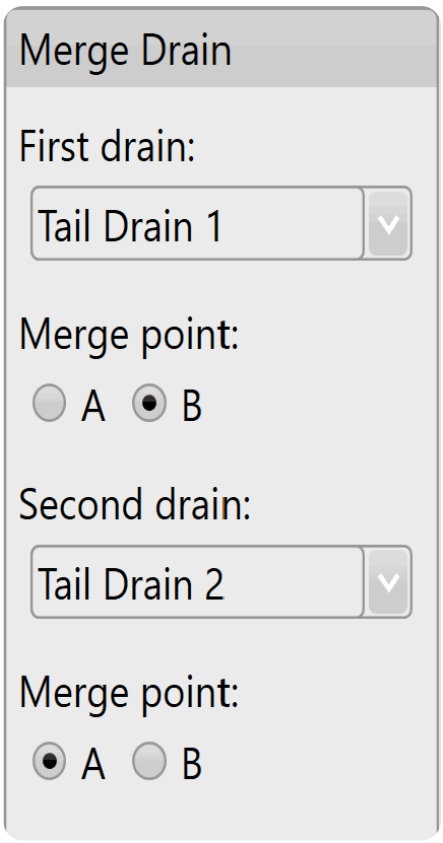


Press **Edit drain** to open a window listing the available drain paths. Select a drain, then press the corresponding button to rename or delete it.

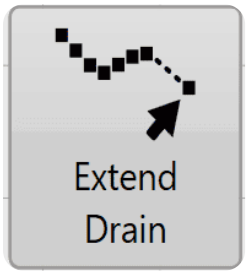
Merge drains

Use this tool to join two drains at either end. Merging creates a copy of the original drains with a joining line. You then have the option to delete the originals.





Extend drain

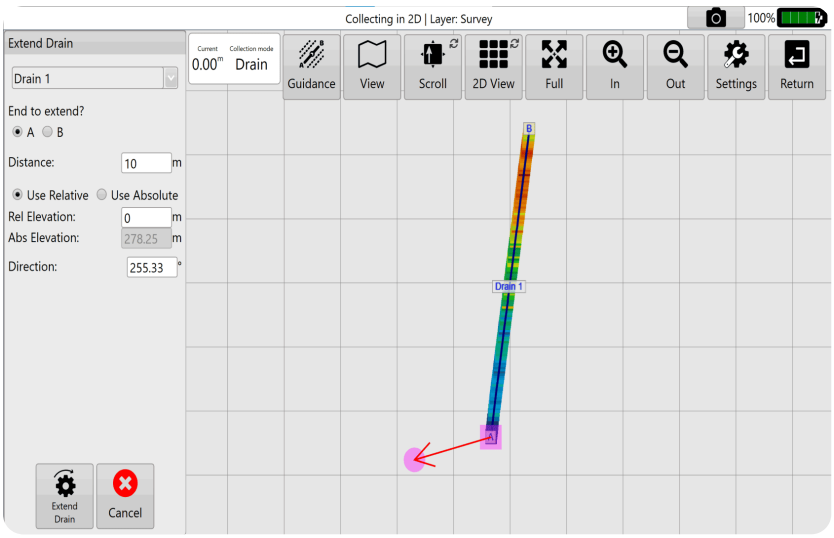


Use this tool to extend a drain from either end of its surveyed path. This is useful when the drain needs to reach a location that the surveying vehicle could not access directly.

Press **Extend Drain** to open the extension screen. You can extend the drain in any direction.

The red arrow indicates both the direction of the extension and the end of the drain that will be extended.

Use the controls on the left to select a drain. Then choose the extension's length, elevation and direction.



Rel elevation adds or subtracts the entered value from the existing drain end's elevation to calculate the extended end's elevation.

Abs elevation sets the extended drain end's elevation to the entered value.

For example, to extend a drain 1ft below an ending elevation of 100ft, use either of these values:

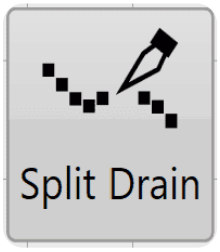
Rel elevation value: -1ft

Abs elevation value: 99ft

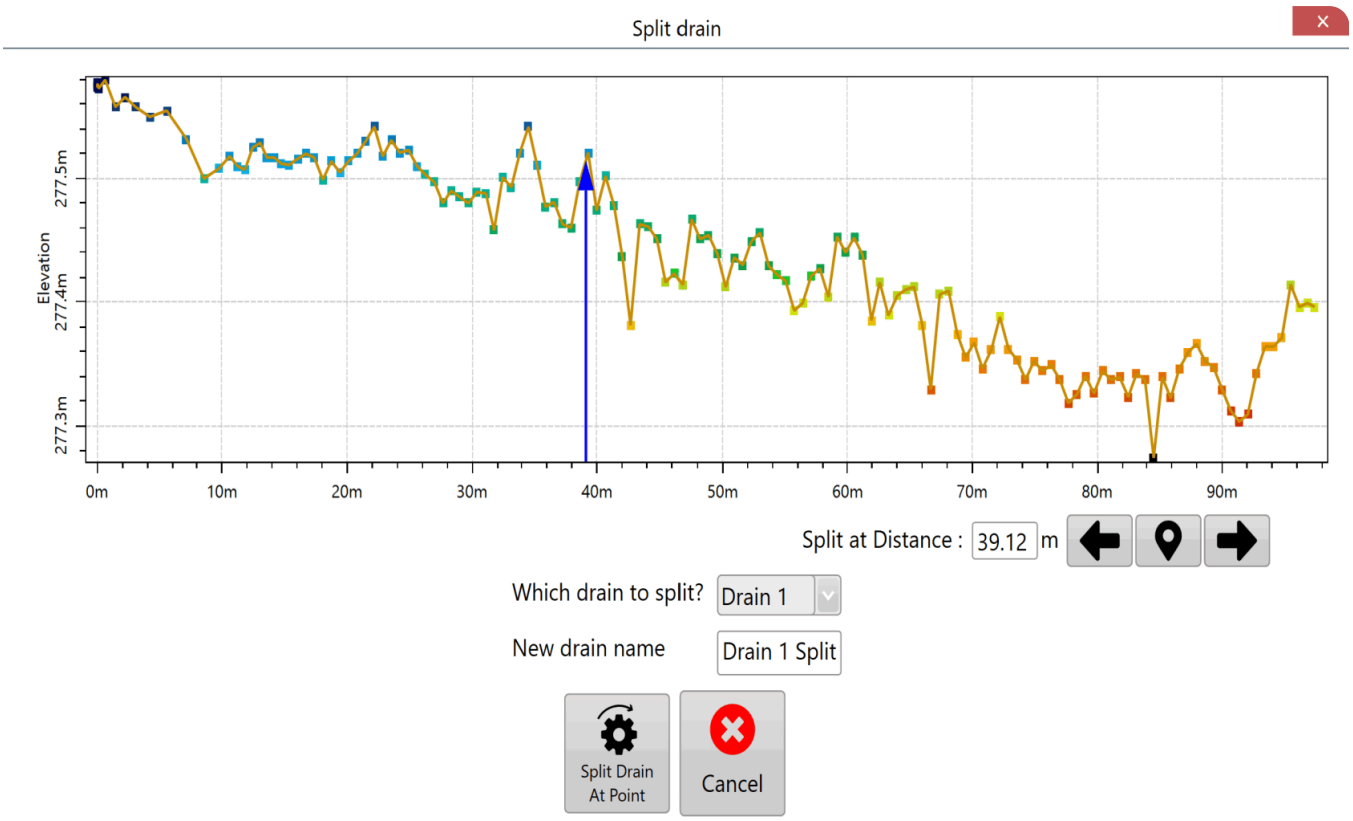
After making the adjustments, press **Extend Drain**.

Split drain

Use Split drain to divide one drain into two separate drains.



First, select the drain from the **Which drain to split?** drop-down menu at the bottom center.



After selecting a drain, press anywhere along its profile. A blue arrow shows where the split will occur. You can also move the arrow using the left and right arrows to the right of **Split at Distance**.

Choose the Marker button to create a Marker for reference.

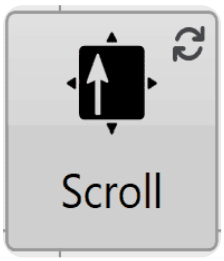
Enter a name in **New drain name**. When the settings are satisfactory, press **Split Drain At Point** to apply the split.

> NOTE: The new drain name must differ from every existing drain name. If it matches an existing name, **Split Drain At Point** is disabled.

4.10 | 2D Current Position Tracking Options

When surveying or implementing, four options control how the vehicle location is tracked on the screen in 2D: **Scroll**, **Center**, **Dir. up**, and **Manual**.

Scroll



The GPS position indicator moves freely on the screen. As it approaches the edge, the screen moves to keep the indicator visible.

Dir. Up



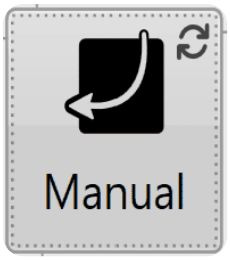
When **Direction Up** is active, the map rotates so that the direction of travel is always at the top of the screen.

Center



The Center option has two parts: it locks the indicator to the center of the screen, moving the map as the indicator moves to keep it centered; it also locks the map orientation with north always at the top of the screen.

Manual



Manual does not lock the map direction or fixate on the indicator location, so you can inspect other sections of the map while surveying or implementing.

> ⚠ Caution: in this mode the vehicle icon can move off the edge of the map.

4.11 | 3D Current Position Tracking Options

When surveying or implementing in 3D, choose between two tracking options: **Follow Tractor** and **Stop Following**.

Follow Tractor



Follow Tractor button.

Press **Follow Tractor** to place the camera behind the tractor. This option keeps the tractor at the center of the screen at all times. In 3D, the camera can only be moved to view the tractor from different angles; it rotates with the tractor as the primary focus.

Stop Following



Stop Following option: the button shown reads “Stopped Following”.

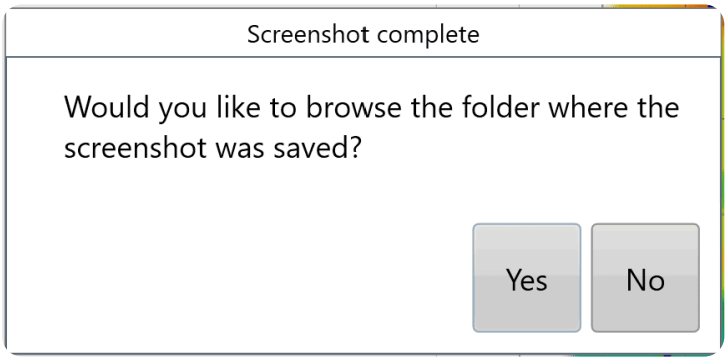
With **Stop Following**, the camera stops following the tractor. The tractor can drive off the edge of the screen without the camera following it. However, whenever you change the camera angle, the camera snaps back to the tractor's current position and uses the tractor as the focal point.

4.12 | Screenshot

To capture the current screen, press the camera button at the top right of any mapping window.



A pop-up appears after the screenshot is taken. Press ‘Yes’ to open the folder where the screenshot is saved.



4.13 | Battery Level

The Battery level indicator is at the top right of the screen, next to the screenshot button. It shows the tablet/computer's battery level and whether it is plugged into power.

