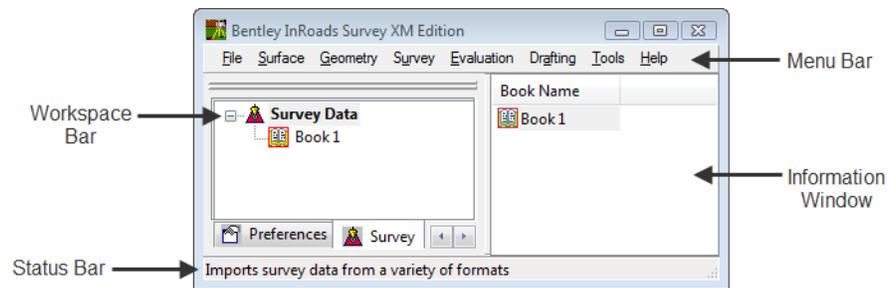


# Chapter 2 - Getting Started with InRoads Survey

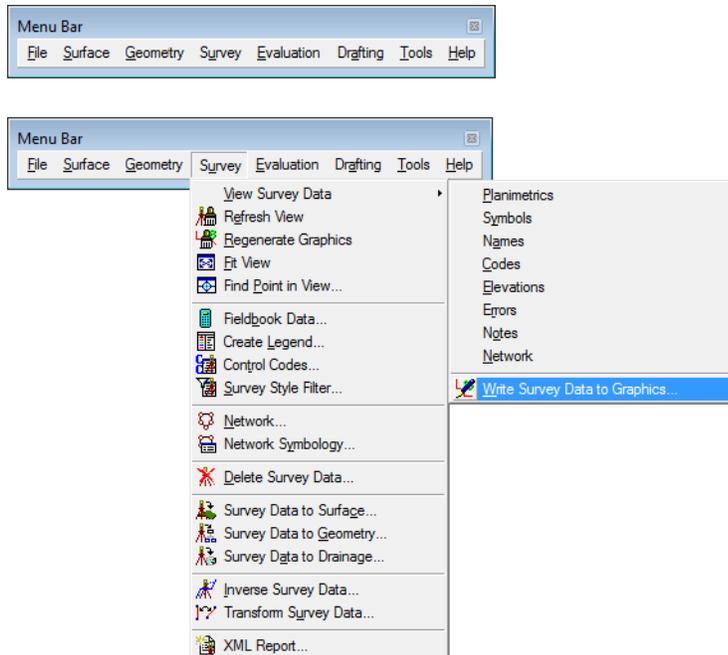
## InRoads Survey Interface

Remember, InRoads Survey is running on top of MicroStation. That means the InRoads interface can be moved outside the MicroStation environment to another screen and that the InRoads interface may hide MicroStation dialog boxes.

There are four main parts to the InRoads Survey Interface, the **Menu Bar**, **Workspace Bar**, **Information Window** and **Status Bar**.

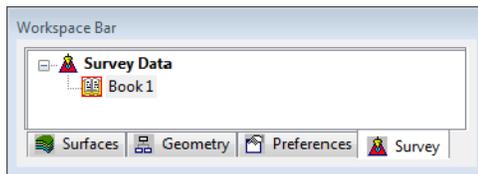


## Menu Bar



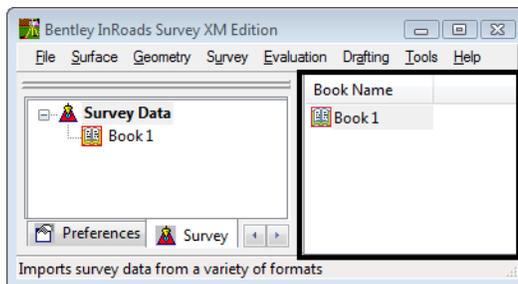
- The Menu Bar pull-down menus are used to access commands, settings, and toolbars.
- An arrow > in the pull down will expand to a submenu.
- ... In the pull down will open a dialog by that name.
- The pull-down menus will vary with the application add-ins that are loaded.

## Workspace Bar



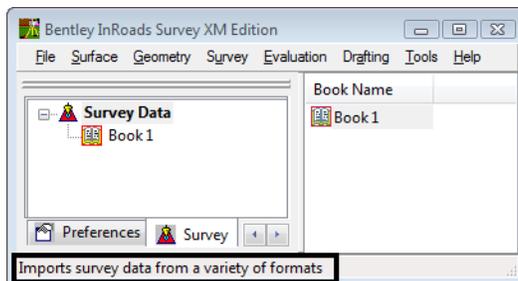
- The Workspace Bar is used to manage and separate the different file formats of the program.
- Right clicking is allowed in the Workspace Bar. The active shortcut menu will vary depending on which Tab is selected.
- The Workspace Bar can be undocked as shown here but it is not recommended.
- To switch between tabs use the scroll arrows or right click to open a short cut menu.

## Information Window



- The Information Window varies depending on which Workspace Bar tab is selected.
- Right clicking is allowed in the Information Window. The active shortcut menu will vary depending on what feature was selected.

## Status Bar



- Located in the lower left hand corner of the InRoads Survey Interface, the status bar is used for file processing feedback and tool descriptions.

## Project Defaults

Setting project defaults prior to working on any project will save time navigating to directories and will ensure the correct InRoads resources are loaded.

## Dialog Items

- Configuration Name – Select from the drop down to change the current project directories and resources.
- Default Preferences

In this section the user enters specific file names with extension names (types) InRoads will be using. The different file types and their uses are as follows:

- ◆ Preferences (\*.xin) – The main file used to define the symbology and dialog preferences.
- ◆ \*Turnouts (\*.txt) – File used to define turnouts.
- ◆ \*Drainage Structures (\*.dat) – File used by Storm and Sanitary software.
- ◆ \*Rainfall Data (\*.idf) (\*.rtc) - File used to calculate rainfall.
- ◆ \*Bridge Sections (\*.txt) - File used to define bridge sections.
- ◆ \*Drafting Notes (\*.dft) – File used by InRoads drafting tools.
- ◆ \*Pay Items (\*.mdb) – File used to calculate pay items and quantities.

- Default Directory Paths.

This section defines directory paths for loading and saving files inside InRoads.

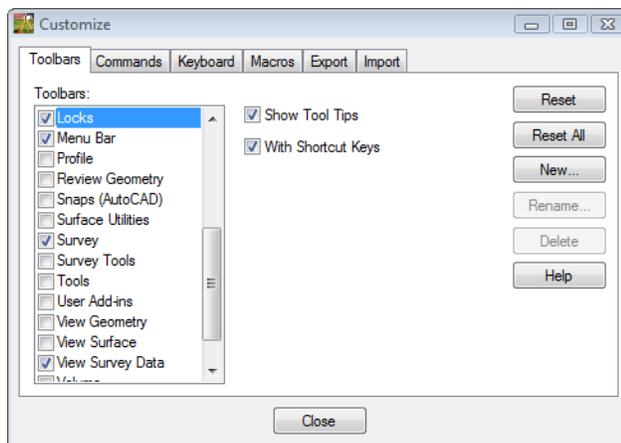
- ◆ Project Default Directory: - default location for opening, saving, importing, and exporting general files.
- ◆ Report Directory - default location where report files such as TXT and XML are generated by the report browser.
- ◆ Projects (\*.rwk) – default location of Project’s files.
- ◆ Surfaces (\*.dtm) – default location of Surface files.
- ◆ Geometry Projects (\*.alg) – default location of Geometry Project files.
- ◆ \*Template Libraries (\*.itl) – default location of Typical Sections Library files.
- ◆ \*Roadway Design (\*.ird) – default location of Roadway Library files.
- ◆ Survey Data (\*.fwd) – default location of Survey Data files.
- ◆ \*Drainage (\*.sdb) – default location of Drainage files.
- ◆ Sheet Style (\*.xsl) – default location of Sheet Style files for XML reports.
- ◆ \*Quantity Manager (\*.mdb) – default location of Quantity Manager Files.

\* Files and directories that do not impact survey applications.

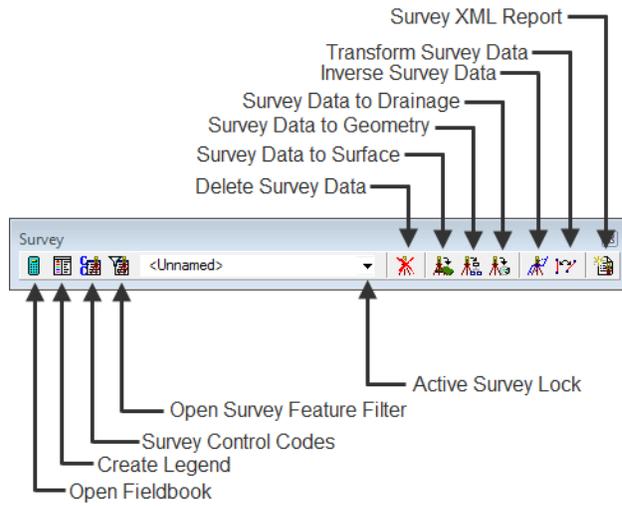
## Toolbars

Toolbars can be opened and docked in the InRoads interface. Toolbars in InRoads Survey can be customized to fit the users workflow or personal preference.

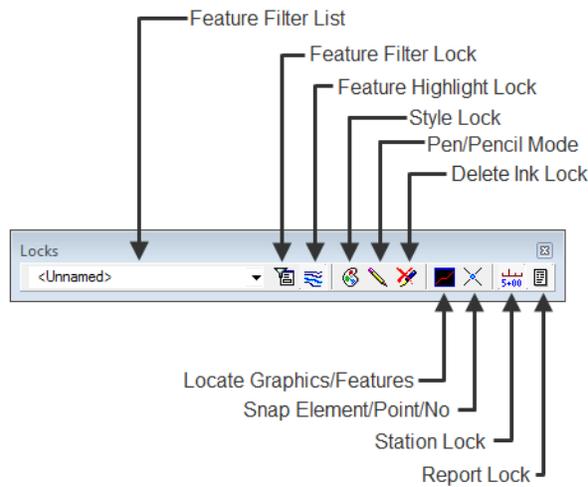
- From the pull-down menu, select **Tools > Customize**. The **Customize** dialog will appear.



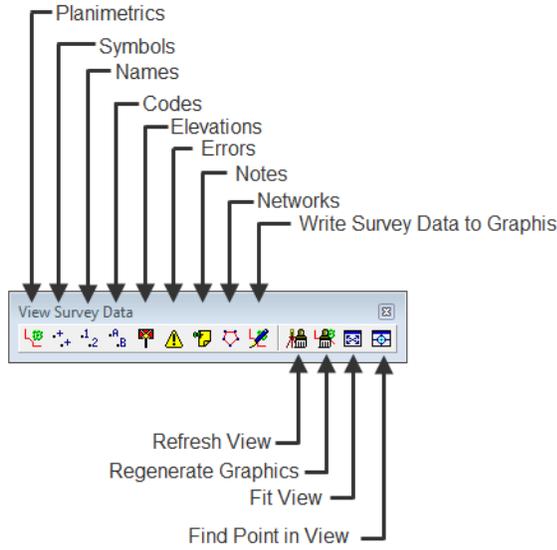
### Survey Toolbar



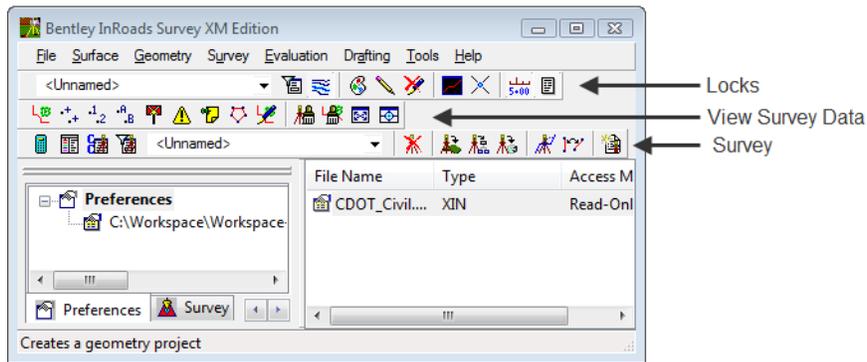
### View Survey Data Toolbar



### Locks Toolbar



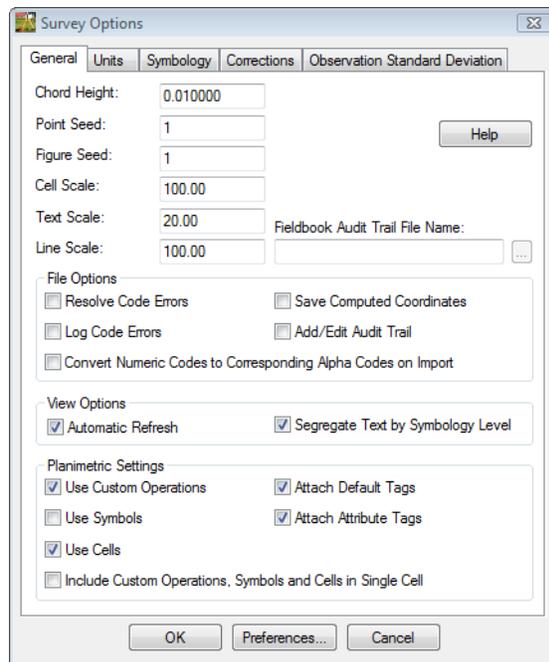
### Docked Toolbars



## Survey Options - General Tab

Survey Options dialog controls additional settings required by Survey. The Survey options can be modified by the user and are stored as an FXP file. Some of the main aspects of this dialog are the control of planimetric scale and the Fieldbook Audit Trail file which tracks changes to the fieldbook and features table.

- From the pull-down menu, select **Tools > Survey Options [General]**.



### Dialog Items

- ◆ **Chord Height:** Controls the curve stroking of elements when saved to graphics, surfaces, and alignments. The smaller the value, the greater number of vertices generated.
- ◆ **Point Seed:** Seed number used when adding points to the survey fieldbook.
- ◆ **Figure Seed:** Seed number used when saving linear planimetrics to a geometry project.
- ◆ **Cell Scale:** Scale factor used when writing survey feature Cells to graphics.
- ◆ **Text Scale:** Scale factor used when writing survey feature Text to graphics.
- ◆ **Line Scale:** Scale factor used when writing survey feature Line Styles to graphics.
- ◆ **Fieldbook Audit Trail File Name:** Text file that saves all edits from the fieldbook and feature table. The file will show the edits Before and After.

**◆ File Options**

- **Resolve Code Errors** – If checked, all code errors found while importing will be taken care of by the **Resolve Code Error** dialog.
- **Log Code Errors** – Will open the **Results** dialog at the end of the import allowing the errors to be saved to a text file.
- **Save Computed Coordinates** – If checked, any computed coordinates will be saved to the fieldbook as individual points.
- **Add/Edit Audit Trail** – If checked, displays the **Results** dialog after each edit is made. Even with it unchecked the file will still keep track of edits.
- **Convert Numeric Codes to Corresponding Alpha Codes on Import** - If checked the numeric codes used in the field will be converted to alpha codes in the fieldbook.

**◆ View Options**

- **Automatic Refresh** – If checked, will regenerate the displayed graphics after each edit.
- **Segregate Text by Feature Level** – If checked, will save the symbols, point names, codes, notes, errors, and elevations to the same level as the survey feature.

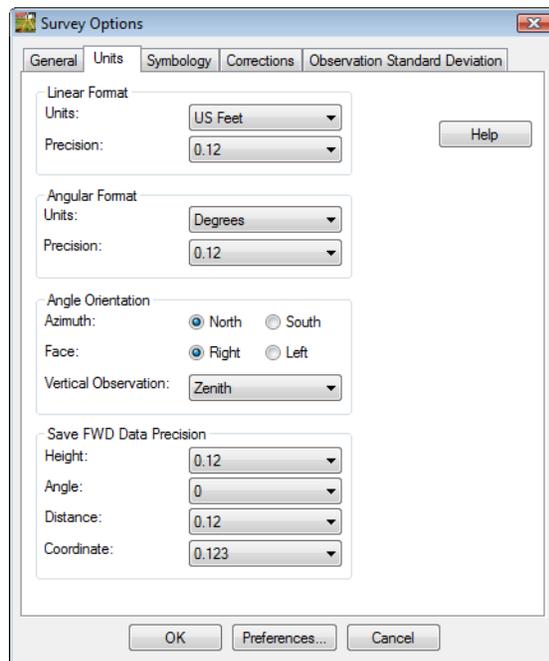
**◆ Planimetric Settings**

- **Use Custom Operations** – If checked, all Custom Operations from the Survey Feature Table will be displayed.
- **Use Symbols** – If checked, all symbols from the Survey Feature table will be displayed.
- **Use Cells** – If checked, all Cells from the Survey Feature table will be displayed.
- **Include Custom Operations, Symbols and Cells in Single Cell** – If checked, all items will be combined into a single cell called NULL.
- **Attach Default Tags** – If checked, a default InRoads tag will be defined and attached to the MicroStation graphic when written to a design file.
- **Attach Attribute Tags** – If checked, a tag, with attribute information and values will be attached to the MicroStation graphic when written to a design file.

## Survey Options - Units Tab

Survey Options *Units* tab controls how raw, linear, and angular, survey data is read by the Fieldbook. The Survey units set in this dialog box have priority over InRoads units options set elsewhere when processing or manipulating Survey data.

- From the pull-down menu, select **Tools > Survey Options > [Units]**.



## Survey Options - Symbology Tab

Survey Options *Symbology* tab controls view planimetrics such as Symbols, Point Names, Codes, Elevations, Errors, and Notes. There are two types of settings for each planimetric display. For the dynamic display of graphics the settings are opened with the **Edit View** button. For the design graphics written to the file the settings are opened with the **Edit** button.

- From the pull-down menu, select **Tools > Survey Options > (Symbology)**

