



EASY STREET DRAW 6.0

Easy Street Draw 6

User's Guide

PAE

Easy Street Draw 6

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Table of Contents

Foreword	0
Part I Welcome to Easy Street Draw (ESD)	7
Part II Introduction	10
1 Why Easy Street Draw (ESD).....	10
2 About help.....	11
3 Getting the most from help.....	12
4 Acknowledgements.....	13
Part III Easy Street Draw (ESD) Basics	15
1 Activating Easy Street Draw (ESD).....	15
2 User interface.....	16
Getting to know the main window	17
3 Starting a casebook.....	18
Starting a new casebook with forms	19
Opening a saved casebook	20
Searching for a casebook	22
Starting a new casebook with a diagram	23
Part IV Working with forms	26
1 Data validation.....	26
2 Managing forms.....	26
Adding forms	27
Reordering forms	28
Deleting forms	29
3 Navigating within a casebook.....	30
Navigating within a form	31
Navigating to another form	33
Part V Working with diagrams	36
1 Getting to know the diagram editing window.....	36
2 Performing basic tasks.....	38
Manipulating shapes, symbols and text	38
Using handles	46
Zooming	46
Undoing/redoing	48
Starting over	49
Working with the clipboard	49
3 Working with streets, symbols and field measurements.....	50
Base layer	51
Streets	52
Lanes & Shoulders.....	62

Dividers	68
Stripes	71
Labels	74
Symbols layer	76
Working with symbols	76
Symbol types	86
Measurements layer	88
Triangulation	88
Station line	93
4 Advanced diagram tasks	101
Configuring user options	101
Using drawing tools	106
Working with templates	110
Creating a drawing template	110
Adding a template group	111
Handling special situations	112
Showing original vehicle position	113
Showing vehicle damage	113
Adding an overpass	115
Drawing unusual street layouts	115
5 Lessons	117
Part VI Output: print, PDF, PowerPoint, export	121
1 Printing a casebook	121
2 Printing a diagram to scale	123
3 Creating a PDF	125
4 Creating a PowerPoint presentation	126
5 Exporting a drawing	127
Part VII Quick reference	129
1 Keyboard shortcuts	129
2 Computer conventions	131
3 Menus and toolbars	131
Menu bar	132
Toolbars	134
Layers tabset	139
Properties bar	140
Part VIII Easy Street Draw (ESD) PRO	143
1 Entering attachment information	143
2 Adding attachments to a casebook	144
3 Linking attachments to a diagram	146
4 Working with non-image attachments	146
5 Working with image attachments	147
Annotating an image	148
Rotating an image	150
Adjusting image appearance	151
Cropping an image	152

Saving an image 153

Index **155**

Part



1 Welcome to Easy Street Draw (ESD)



ESD (Easy Street Draw) is a powerful software program designed to manage 2D diagrams, digital evidence, and forms. ESD software allows users to quickly and efficiently document and draw the scene of a traffic accident, crime, or other incident. ESD's large selection of pre-drawn streets and symbols fit most circumstances. ESD includes the following:

Form data

ESD's Case Manager window provides the ability to construct a casebook containing the forms relevant to the incident. Custom form development helps ensure familiarity to the field operator while tailored drop-down menus increase speed and accuracy.

Rich Text

ESD's text editor provides a spell-checked text window where descriptive information regarding the case can be recorded.

GPS Stamping

GPS Stamping allows the field operator to assign an accurate LAT/LONG to the individual incident report to support future spatial analysis.

Diagrams

Using PAE's proven diagramming technology, ESD's diagram editor enables users to quickly and accurately draw any incident scene. ESD provides a large selection of pre-drawn streets, structures, vehicles, bodies, and various other symbols. In addition, ESD includes many application-specific "intelligent" shapes to make the drawing process easier and more effective.

Digital Evidence

ESD's Attachment facility provides tools to attach digital photographs, audio and video recordings and other forms of digital evidence. ESD's photo manipulation tools make it easy to annotate, rotate, and adjust the brightness and contrast of attached photographs without altering the original.

Analysis Repository Integration

ESD supports nearly all delimited exports for easy integration

into any existing analysis repositories, including XML, PDF, and PowerPoint. And with an extremely small data and diagram file size, real-time reporting has never been easier!



Part



2 Introduction

The topics in this section show you how ESD, coupled with this help file, can make reporting easier and more efficient.

Topics include:

- Why ESD
- About help
- Getting the most from help
- Acknowledgements

2.1 Why Easy Street Draw (ESD)

ESD was developed with the end user in mind. It is designed for in-field use - including use on tablet PCs, with or without internet connectivity. Best of all, it's EASY to use! With very little training you can document and storyboard any pre or post action incident.

Documentation may include:

DATA COLLECTION

- Customizable form libraries
- Drop down menus
- Rich text editing
- Diagrams/photos embedded in entry forms

DIAGRAMMING

- Drag and drop engine.
- Scaled/vector engine
- Complete symbol libraries, including the most comprehensive library of current military vehicles
- Proven reliability - used by over 300,000 in the law enforcement community

DIGITAL EVIDENCE ATTACHMENT

- Attach any electronic evidence such as photos, video, office documents
- Annotate or enhance photographs without altering the original
- Register evidence to diagrams
- GPS/MGRS coding of incident file

DATA SHARING

- Extremely small data and diagram file size
- Export capability to PDF, PowerPoint, image files

And we do not intend to stop there. Utilizing User Groups, we rely on experts in the field to validate relevancy and accuracy of applications.

2.2 About help

This guide will walk you through three fundamental electronic information types that make up ESD: 1) form entry; 2) diagrams; and 3) evidence management (photos, video, audio, pdf, MS Office).

You will find information organized according to the following main topics:

Basics

ESD basics covers software activation, the user interface, and starting a casebook.

Forms

Working with forms introduces the case manager, as well as provides an overview of form navigation and validation.

Diagrams

Working with diagrams deals with tasks performed on the diagram editor - including topics for each each of the three layers.

Attachments

Working with attachments includes information for getting the most out of the ESD attachment feature.

Output

The Output topic encompasses the various output options, including print, export, and PDF and PowerPoint creation.

Quick reference

Lastly, this help file contains a quick reference. The quick reference includes

topics such as keyboard shortcuts, conventions, and menu/toolbar overview - topics that can make your work in ESD all the more efficient.

2.3 Getting the most from help

The step-by-step instruction in this help file will assist you in completing tasks quickly and easily. In most cases, there is more than one way to perform a task. We describe the preferred method for performing a task and include alternative methods when available, so you can choose what works best for you.

Not sure where to begin? If you are new to ESD, we encourage you to start at the beginning and work your way down.

You may also want to consider the following:

Getting started

- If you have not yet registered your software, Activating Easy Street Draw will explain how to go about doing so.
- Review the Quick reference topics for keyboard shortcuts and conventions, as well as an overview of the menus and toolbars available in ESD.

Learning more

- See Advanced diagram tasks to learn how to configure user options, use drawing tools, work with templates, and handle special drawing situations.
- Read over Working with attachments to learn how to get the most out of the attachment feature.
- Check out the Output: print, PDF, PowerPoint, export topic to discover the various ways you can disseminate casebook information as quickly and easily as possible.

And keep an eye out for the following ...

Note Take note of important details provided here - they alert you to what you can expect while working in ESD.

Tip! These helpful hints are located throughout this help manual - highlighting even more ways to make your job easier and more efficient.

2.4 Acknowledgements

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Part



3 Easy Street Draw (ESD) Basics

This section provides you a broad overview of the basics! Here you'll find everything you need to get started from Activating ESD to starting a casebook.

Topics include:

- Activating ESD
- User interface
- Starting a casebook

Note This manual may contain descriptions of some element or feature that are not present in your installation of ESD. If you would like to add these features, contact PAE.

3.1 Activating Easy Street Draw (ESD)

Once you have installed the ESD software, you will need to activate your license(s). You have three options for activation: Internet, Phone, or Email.

Open ESD, and click the Activate link from the "Evaluate Easy Street Draw" screen. Choose one of the three options to activate your ESD license:

Option #1: Activate online

1. Click **Activate online**, then click the **Next** button.
2. When prompted, use the License ID and Password, as provided with your software. If desired, you can also specify an Installation Name.

Note: Passwords are case sensitive.

Option #2: Activate Manually

Note: You will be asked to provide the following for manual activation: **License ID** (as noted in Option#1), and **Password**. You will need an Internet connection to perform manual activation.

1. Click **Activate Manually**, then click the **Next** button.
2. Enter your **License ID** and **Password** into the text fields provided, then click the **Generate Request** button. An activation request code will be generated and displayed.
3. Copy the activation request code to your clipboard using the **Copy** button, then click the **Open Activation Web Page** button and paste the code. Click the

Submit button.

4. An activation code will be generated and displayed. Copy it to your clipboard, then paste it into the **Activation Code** text field. Click the **Next** button.
5. Click the **Finish** button on the Congratulations screen.

Option #3: Activate by telephone

Note: You will be asked to provide the following for phone activation: **License ID** (as noted in Option#1), **System ID 1** and **System ID 2** (as accessed below)

1. Click **Activate by Telephone** – you will be provided two (2) System ID numbers.*
2. Follow the steps displayed in the "To activate Easy Street Draw" section of the Registration & Activation screen.
3. When all fields have been filled out, click the **Next** button.
4. Click the **Finish** button on the Congratulations screen.

3.2 User interface

Being familiar with the main window can make your work in ESD even more productive. This section will introduce you to the various parts of the main window.

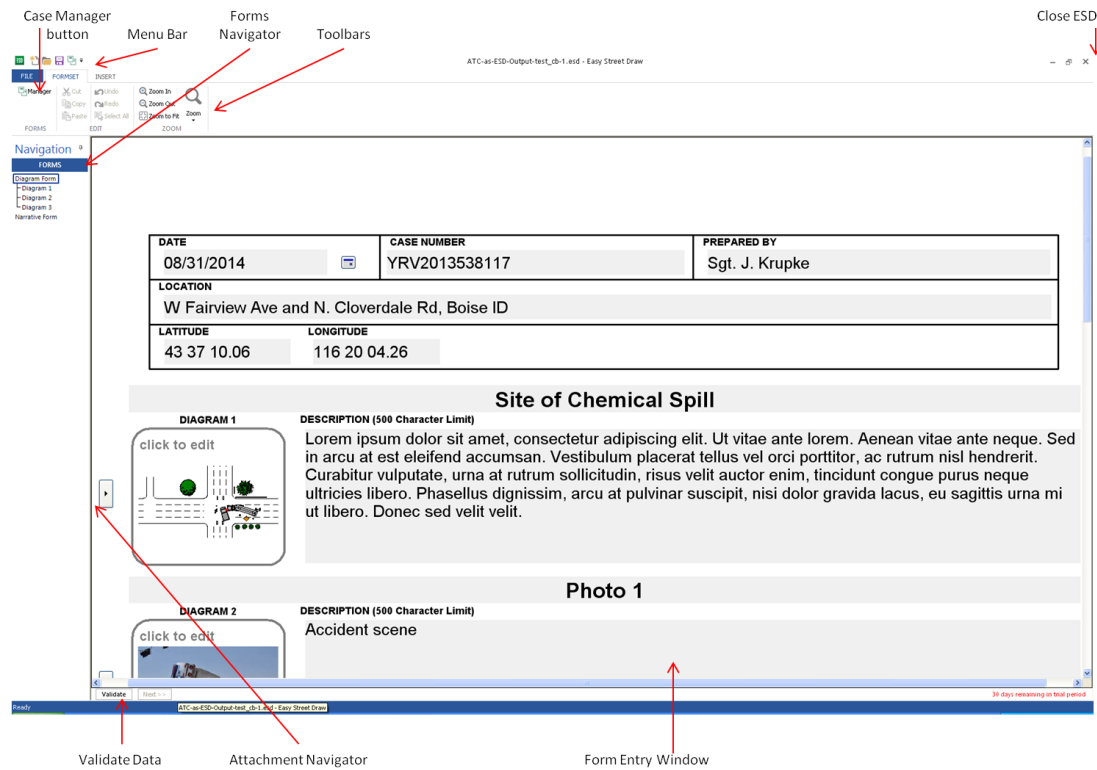
See Also:

Getting to know the diagram editing window

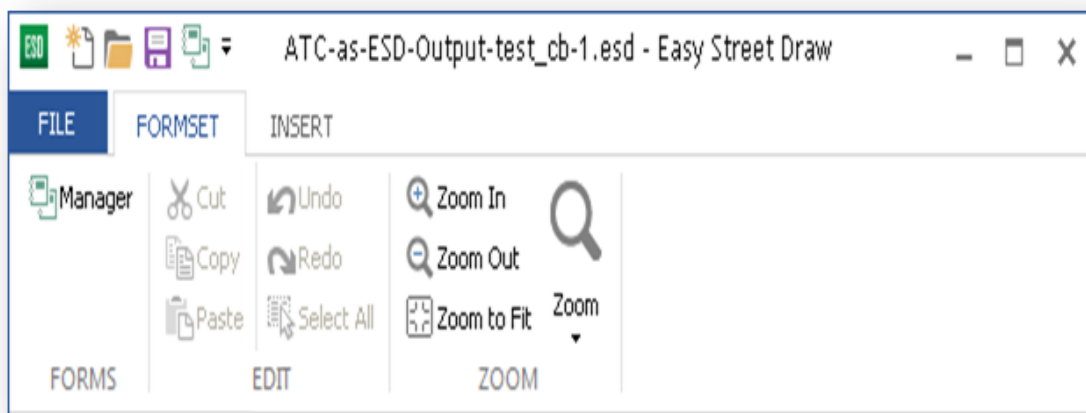
Quick reference

3.2.1 Getting to know the main window

Before using ESD, you should become familiar with the main window...



Menu bar and toolbars



ESD has a standard menu bar and several toolbar tabs at the top of the main

window. You can access most commands in two ways:

- From the menu bar

-OR-

From the toolbar

Note When you are working on a drawing in ESD's diagram editor, you can access context-related menus by right-clicking on a drawing symbol.

See Also:

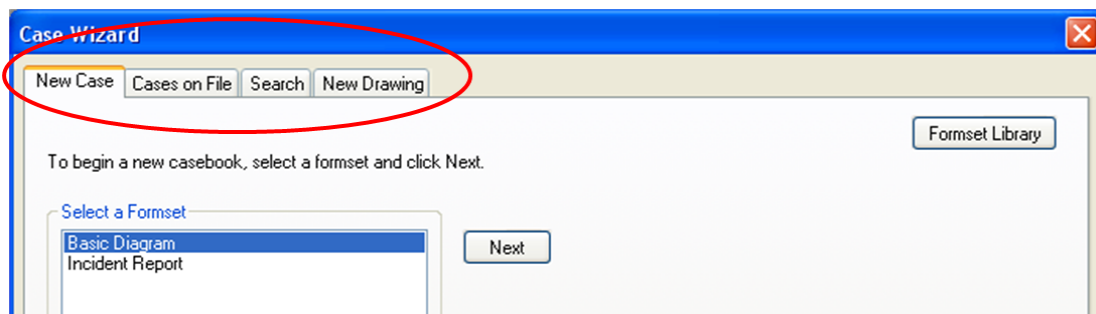
Getting to know the diagram editing window

Menu bar

Toolbars

3.3 Starting a casebook

The Case Wizard window automatically opens when you start ESD. The Case Wizard provides four activity tabs: **New Case**, **Cases on File**, **Search**, and **New Drawing**.



This section provides an overview of each activity.

Topics include:

- Starting a new casebook with forms
- Opening a saved casebook
- Searching for a casebook
- Starting a new casebook with a diagram

3.3.1 Starting a new casebook with forms

Your ESD application contains at least one formset with at least one summary and one diagram form. In most instances you will begin a new casebook using one or more of these forms.

Starting a casebook with forms

To start a new casebook that includes forms, you'll begin with the New Case tab.

Note Form libraries made available to you depend on your specific ESD installation. If you have access to multiple formsets, you will select a formset before selecting individual forms.

To start a casebook using forms

1. Select the **New Case** tab.

2. Select a formset from the top window. A list of the forms that make up that formset will appear in the "Contents of <whatever the name of the formset is>" window below. That list is for your information only; you can't change the composition or order of forms in a formset from here.

Note If you have a single formset available, you will bypass step two and go directly to choosing forms for your casebook (Step 4).

3. Click the **Next** button. You will be directed to the Active Formset window; see *example, below*.
4. Click on a form you wish to add to your casebook.

Note Form libraries made available to you depend on your specific ESD installation.

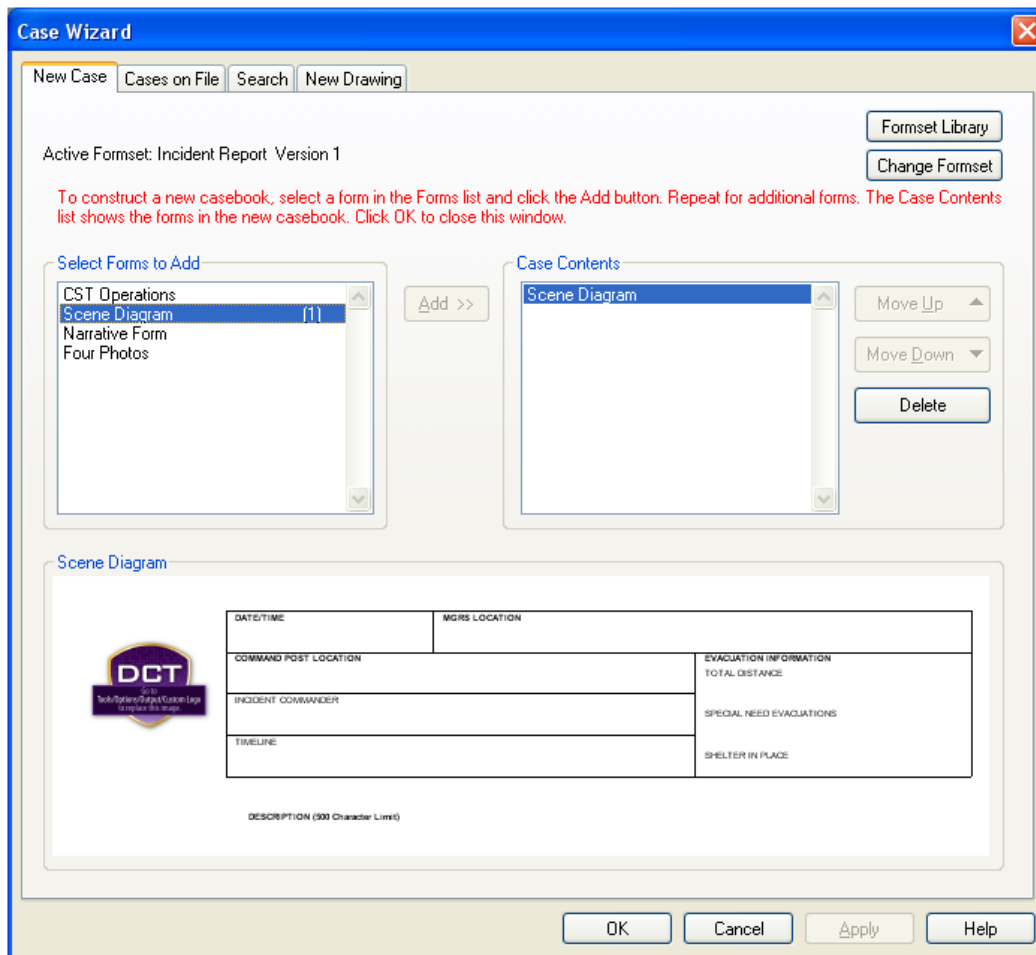
5. Click the **Add** button.

Repeat steps 4-5 until you have added all necessary forms.

Note When the Case Forms list contains two or more forms, you can use the **Move Up** and **Move Down** buttons to reorder the forms in the casebook. If a form is selected in the Case Forms list, click the **Delete** button to remove it from the casebook.

6. Click **OK** to close the Case Wizard window. The casebook will open with selected forms.

Example: Active Formset window



3.3.2 Opening a saved casebook

If you need to review, edit, or complete a saved casebook, you will want to access the Cases on File tab and select the appropriate file.

To open a saved casebook

1. Click the **Cases on File** tab on the Case Wizard window. *See example, below.*
2. Select the appropriate folder from the navigation tree.
3. Double-click on the file you wish to open.

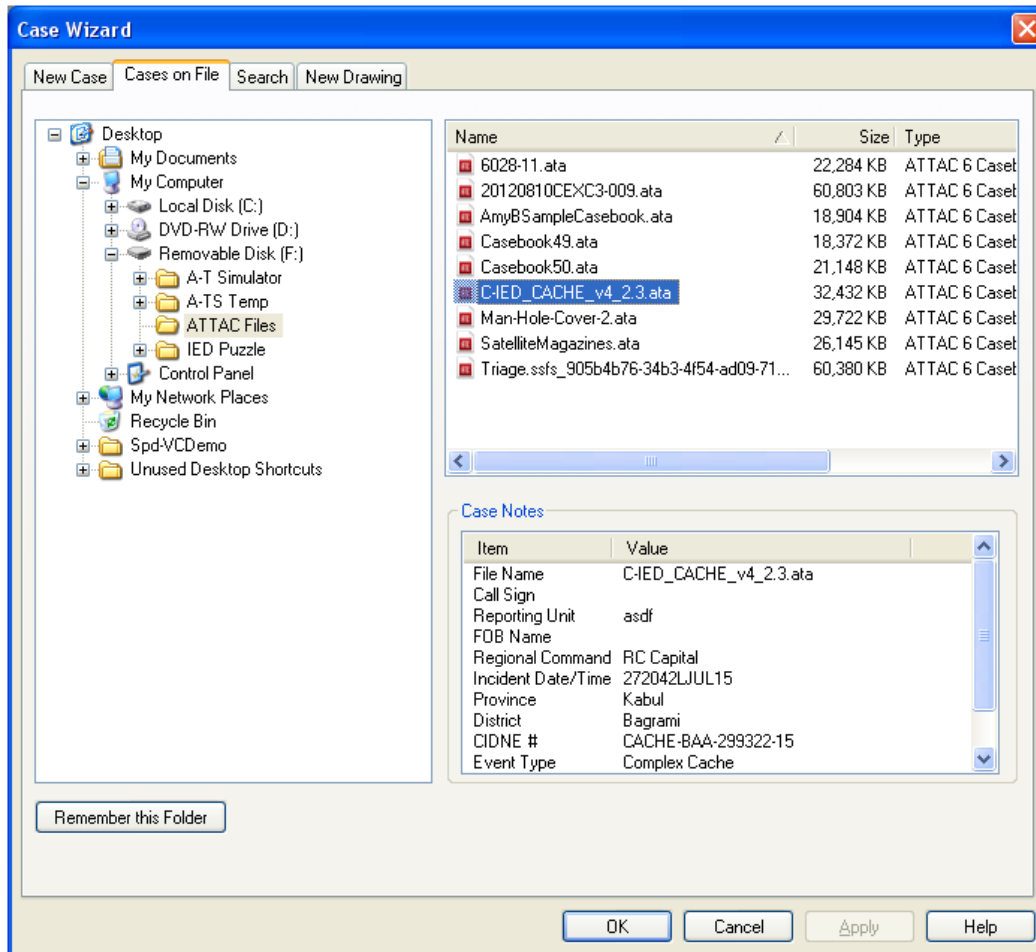
-OR-

Select the file you wish to open.

4. Click **OK** to open the selected casebook.

Tip! If you frequently open files in the same folder, navigate to that folder using the navigation tree and then click the **Remember this Folder** button. The selected folder will become the default starting location for the Cases on File window.

Example: Case Wizard Cases on File page



Note When you open the Cases on File page, the window to the left displays all the folders on your computer's hard drive and other storage devices.

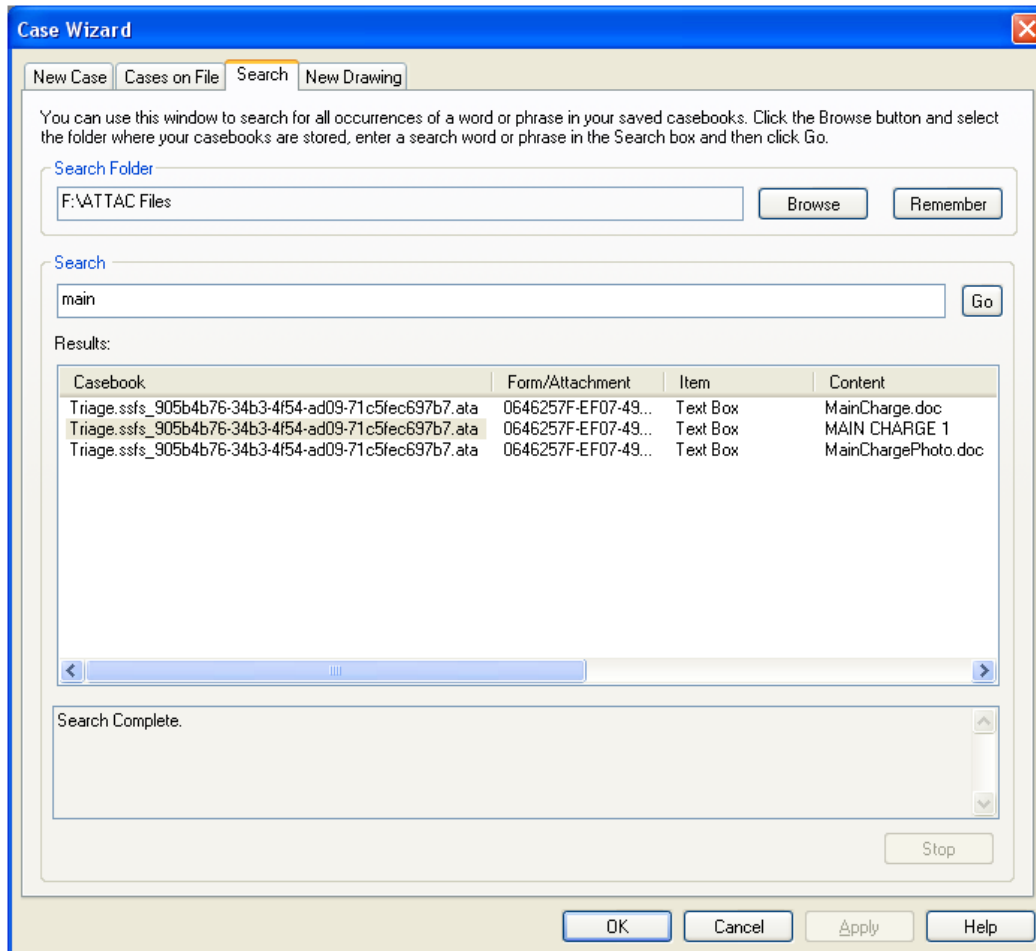
Use the + buttons to open folders and access additional files.

When you select a folder from Cases on File folder tree, all ESD files will display in the window to the right. When you select a file, any notes associated with the casebook will be displayed in the **Case Notes** window.

3.3.3 Searching for a casebook

With the Case Wizard's search feature, you have the ability to search your saved casebooks for a specific word or phrase.

Example: Case Wizard Search page



To search for an existing casebook

1. Click the **Search** tab on the Case Wizard window.
2. Browse to the file folder you wish to search.

Tip! If you frequently search for files in the same folder, navigate to that folder and then click the **Remember** button. The selected folder will become the default search folder.

3. Type your search string (the word or phrase for which you want to search).

Note The search feature will search for words or phrases in the actual casebook - it will not search for words or phrases in the casebook file name.

4. Click **Go** to find all casebooks in selected folder that contain the search string. Casebooks will be listed in the **Results** window.
5. Double-click on the casebook file you wish to open.

-OR-
Click on the casebook file you wish to open.
6. Click **OK**.

3.3.4 Starting a new casebook with a diagram

ESD provides you the option to open a single diagram page.

Starting a casebook with a diagram

If you only need to complete a new diagram, you'll select the **New Drawing** tab. When creating a new drawing, you will usually begin with a drawing template. A template provides a basic layout for the diagram. The top area of the New Drawing window provides several buttons; each button provides access to a specific template group.

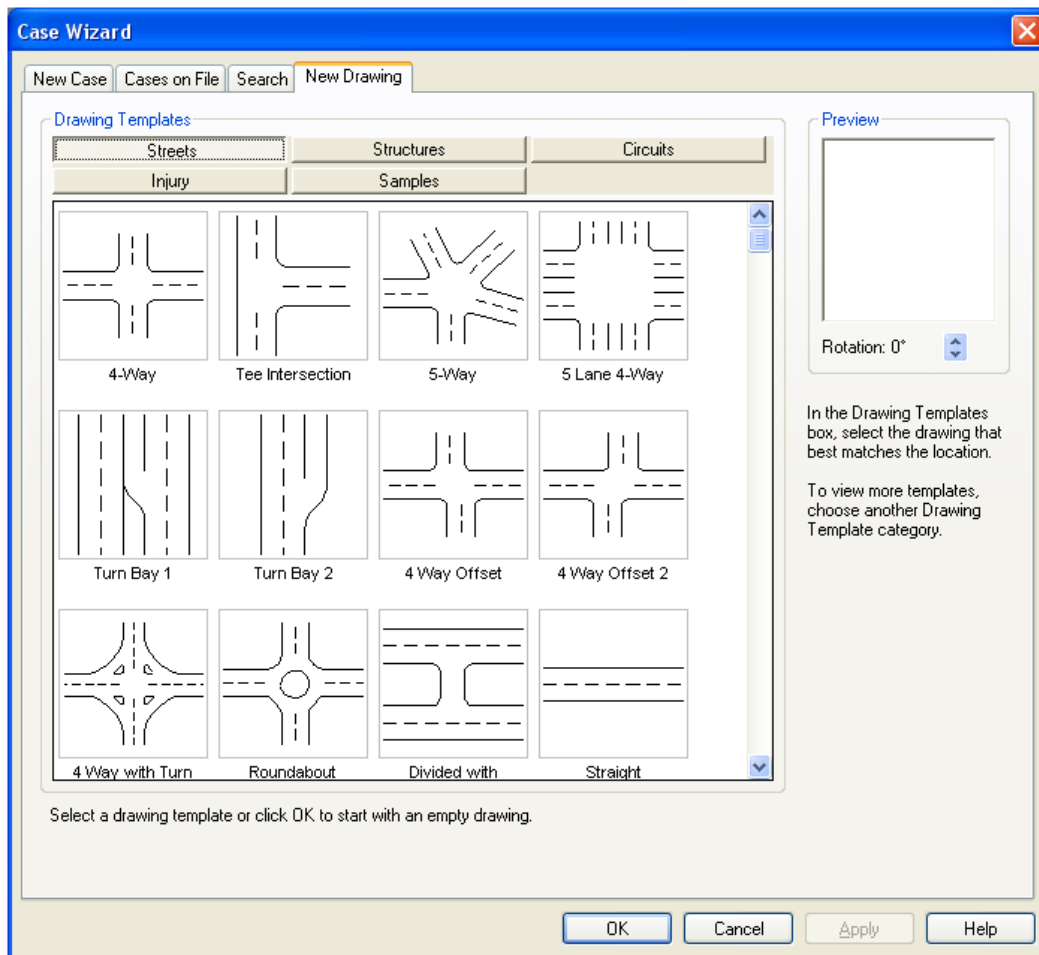
Note: Template names/options may vary depending on your specific ESD installation.

To start a new casebook with a single template diagram

1. Click the **New Drawing** tab.
2. Browse through the template groups (**Streets, Structures, Circuits, Injury, or Samples**) to find a template similar to the scene you wish to draw.
3. Double-click on the template you wish to use.

-OR-
4. Select the template you wish to use. A thumbnail image of the template will display in the preview window.
5. Click the **OK** button to open the drawing page.

Example: Case Wizard New Drawing Page



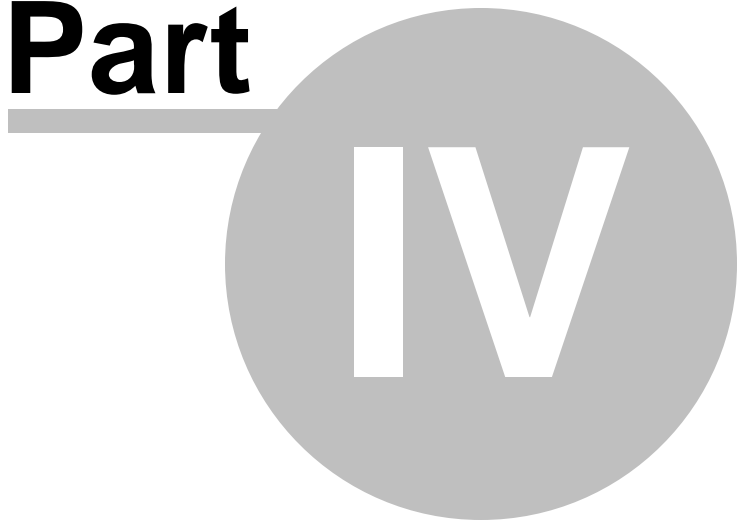
Tip s!

- Once a template is selected, you can change the template's rotation. Under **Preview**, click the **Rotation** arrows.
- You can create your own drawing templates and add them to the template selections. See *Creating a drawing template*.
- If you prefer to start with a blank drawing, simply click **OK** without selecting a template.

See Also:

Working with diagrams

Part



4 Working with forms

ESD casebooks are composed of forms. Form libraries are installation specific, but all forms may include text entry boxes, drop-down menus, check boxes, date selection and GPS acquisition buttons, and diagram drawing and narrative text areas.

This section focuses on how to manage your work in ESD.

Topics include:

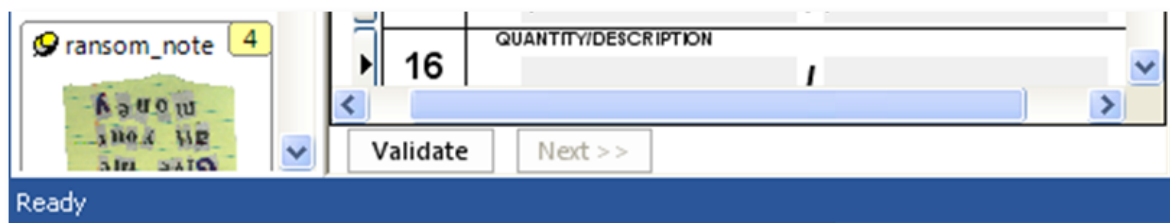
- Data validation
- Managing forms
- Navigating within a casebook

4.1 Data validation

ESD gives you the option of validating your data before dissemination. Validation helps to ensure you did not miss any required fields.

To validate a casebook

1. Click the **Validate** button, located near the bottom of the ESD window.
ESD will check each form field in sequence, stopping at the first item that fails the validation test.
2. To continue the validation process, click the **Next** button in the lower left corner of the ESD window.



4.2 Managing forms

The Case Manager manages the forms you have available for each casebook. This section shows you how ...

Topics include:

- Adding forms
- Reordering forms
- Deleting forms

4.2.1 Adding forms

You have the option to add additional forms to the current casebook.

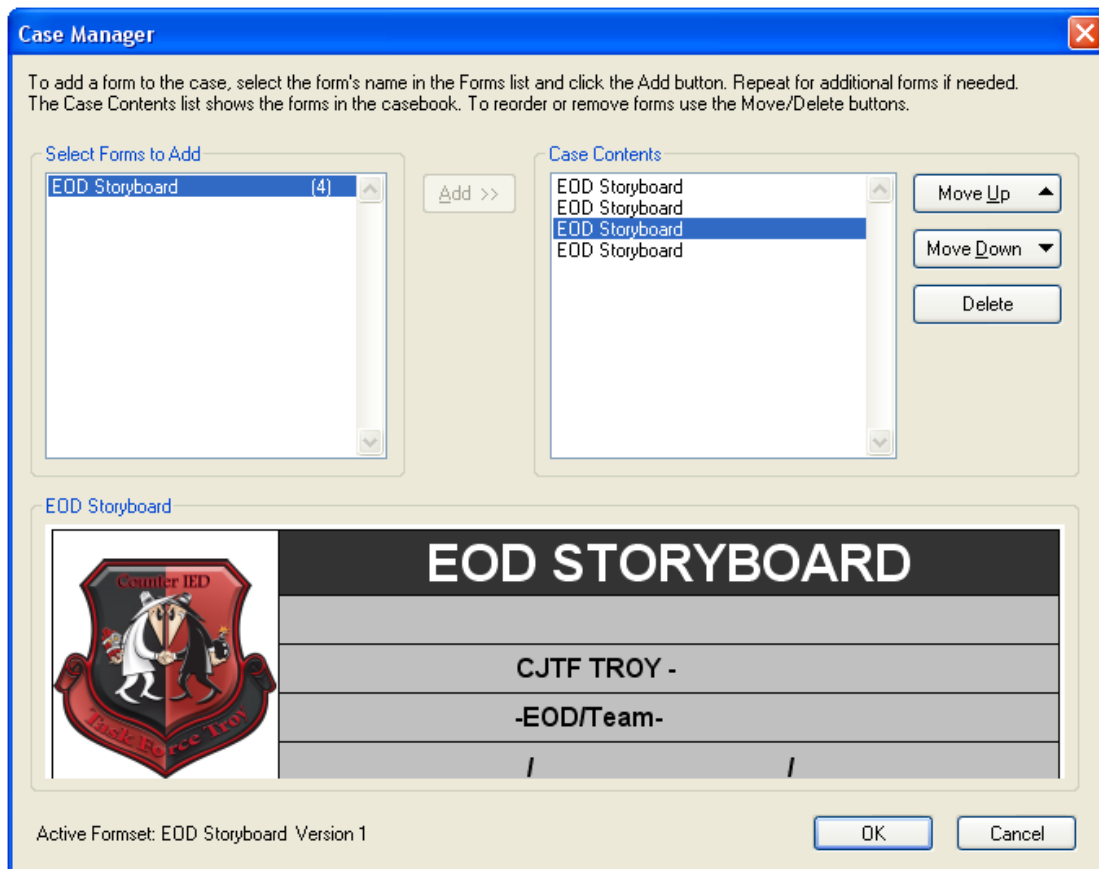
To add a form to the current casebook

1. Click the **Case Manager** button, located under the toolbar. ESD will open the Case Manager window.
2. Select the form you wish to add.

Not Form libraries made available to you depend on your specific ESD installation.
e

3. Click the **Add** button. The form will be displayed in the Case Contents window. Repeat steps 2 and 3 until you have added all forms you wish to add.
4. Click the **OK** button to return to the open casebook.

Example: Case Manager window



4.2.2 Reordering forms

You have the ability to change the order of most forms in your casebook.

Reordering forms in casebook

Forms will be displayed in the order they were selected. You can change the order from the Case Manager.

Not e Forms that have text fields linked to subsequent forms will always be listed before the others. Therefore, such forms will have limited reorder-capability.

To change the order of the forms in the current casebook

1. Click the **Case Manager** button located under the toolbar. ESD will open the Case Manager window.
2. Select the form you wish to move.
3. Click the **Move Up** button until the form is the appropriate order within the list.

-OR-

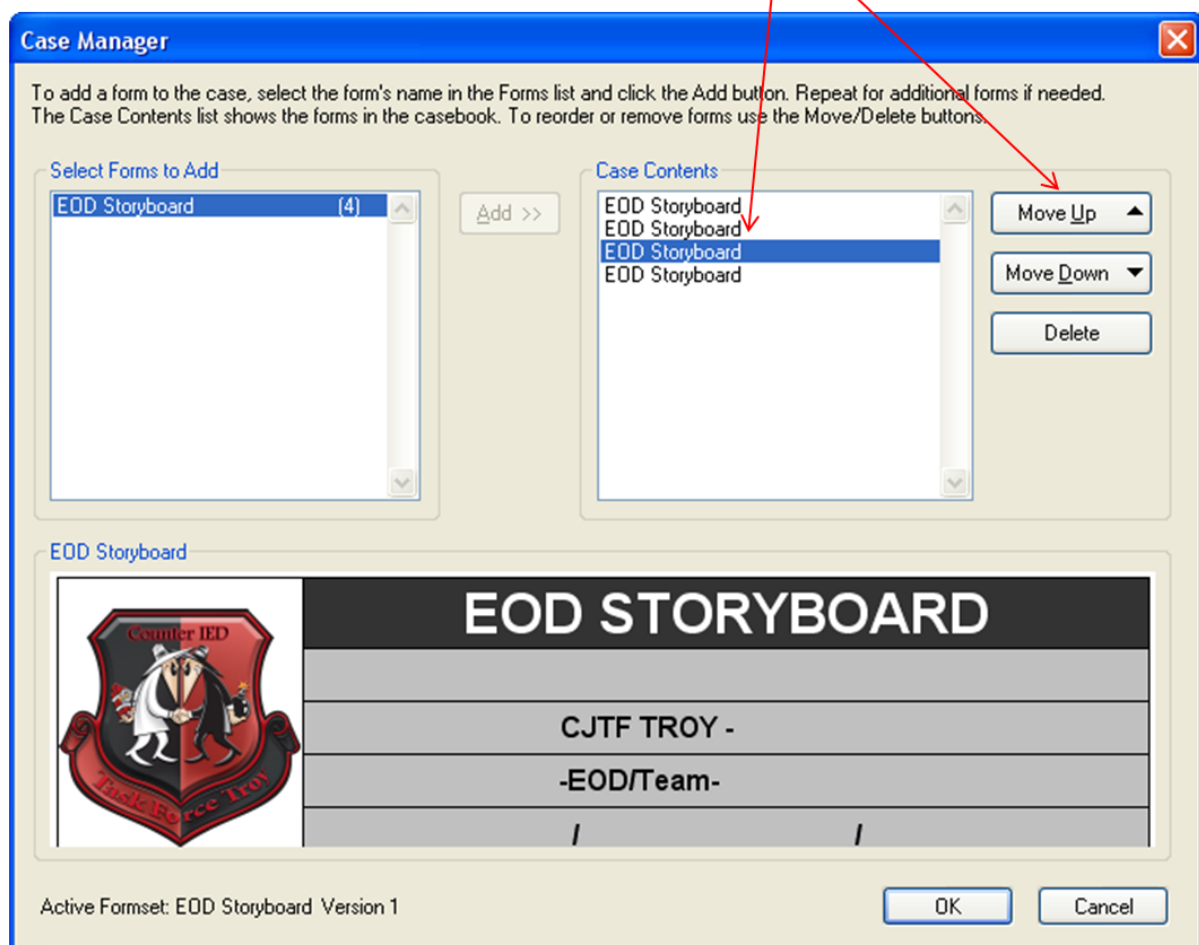
Click **Move Down** button until the form is in the appropriate order within the list.

Repeat steps 2 and 3 until all forms are appropriately ordered.

4. Click the **OK** button.

Click on a form in the
Case Contents window...

...and then click the Move
Up or Move Down button
to reorder casebook forms



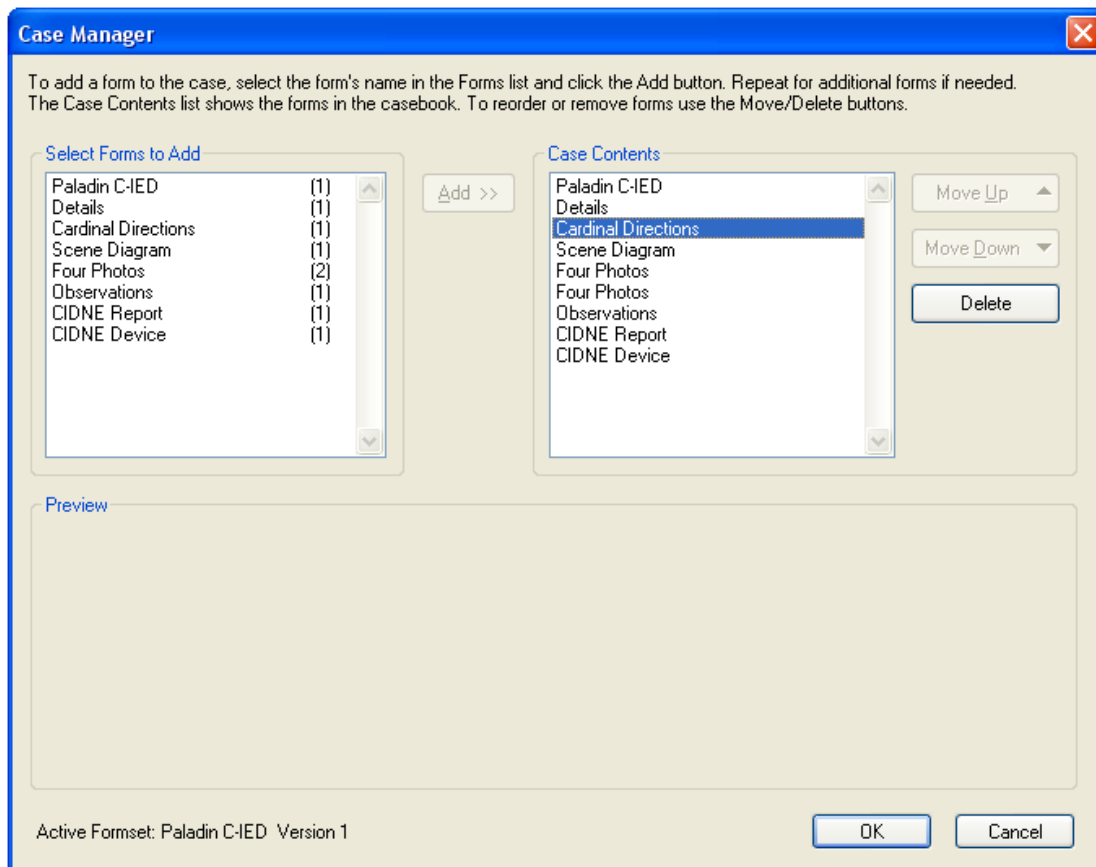
4.2.3 Deleting forms

If you no longer need a form that was added, you can simply remove it from the current casebook.

To delete a form from the current casebook

1. Click the **Case Manager** button located under the toolbar. ESD will open the

- Case Manager window.
2. Select the form you wish to delete.
 3. Click the **Delete** button.
- Repeat steps 2 and 3 if necessary.
4. Click the **OK** button.



4.3 Navigating within a casebook

Each form within ESD may contain several types of data entry boxes - including text boxes, drop down lists, check boxes, and date and GPS selection buttons. In addition, each casebook will more than likely contain multiple forms. Therefore, seamless navigation within individual forms - as well as form to form - is important to your work in ESD.

This section will introduce you to the various ways of navigating within a casebook.

Topics include:

- Navigating within a form
- Navigating to another form

4.3.1 Navigating within a form

Understanding the various ways of navigating a casebook allows you to decide for yourself the quickest and most efficient way to get from point A to point B.

Navigating within a form

To navigate to an entry box

- Click the mouse in the entry box you wish to access.

-OR-

Press the **TAB** key on your keyboard. The cursor will move to the next entry box on the form.

To scroll a form vertically

- Use the scrollbar at the right edge of the form window.

-OR-

If your mouse or other pointing device includes a scroll wheel, you can scroll the form by rolling the wheel.

Navigating to a word processing or diagramming editor

If the current form contains a diagram area or an extended text area, such as narrative or incident description, ESD will open a separate editing window.

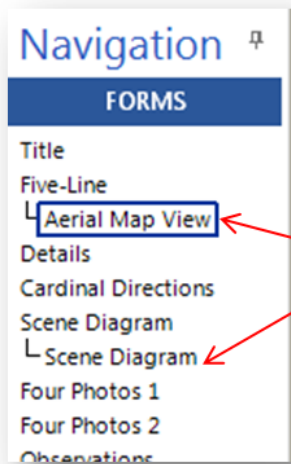
To navigate to the diagram editor

- Click on the diagram area (it will usually read **Click to edit** or something similar). ESD will replace the form editing window with the diagram editor.

-OR-

On the form navigator, click on the Diagram that drops down below the appropriate form. This will navigate directly to the diagram editor.

After you complete work on the diagram, you can return to the form by selecting its name on the form navigator.



Click on the subordinate element to navigate directly to the corresponding editor

To navigate to the word processing editor

- Click the rich text entry box (it will usually read **Click to edit** or something similar). ESD will replace the form editing window with the word processing editor.

-OR-

On the form navigator, click on the Summary that drops down below the appropriate form. This will navigate directly to the word processing editor.

After you complete entry in this editor, you can return to the form by selecting its name on the form navigator.

Form entry keyboard shortcuts

Most form entry items provide keyboard shortcuts for activation.

Examples:

- To select a check box, press the **TAB** key on your keyboard until the active context box (a blue dashed rectangle) moves to the checkbox; press the spacebar to select the checkbox.
- When you tab to a list item, ESD will automatically expand the list. To select an item in the list click it with the mouse.

-OR-

Press the down arrow until the desired item is selected.

-OR-

Begin typing the name of the desired item. ESD will auto-complete the name of the item using the letters you have entered so far. Continue typing until the correct item is selected and then press the **TAB** key to move to the next form item.

- To open the diagramming editor using the keyboard, tab to the diagram box on the form and press the spacebar.
- To open the word processing editor using the keyboard, tab to the text display box on the form and press the spacebar.

See Also:

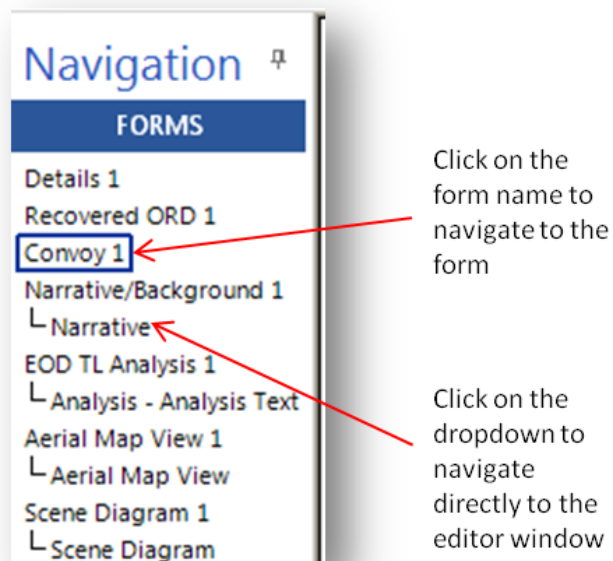
Keyboard shortcuts

4.3.2 Navigating to another form

ESD allows you the ability to move from one form to another with just a click of the mouse.

Navigating to another form

To move from form to form, use the **Forms** navigator pane on the left hand side of the ESD window.



Click on the form name to navigate to the form

Click on the dropdown to navigate directly to the editor window

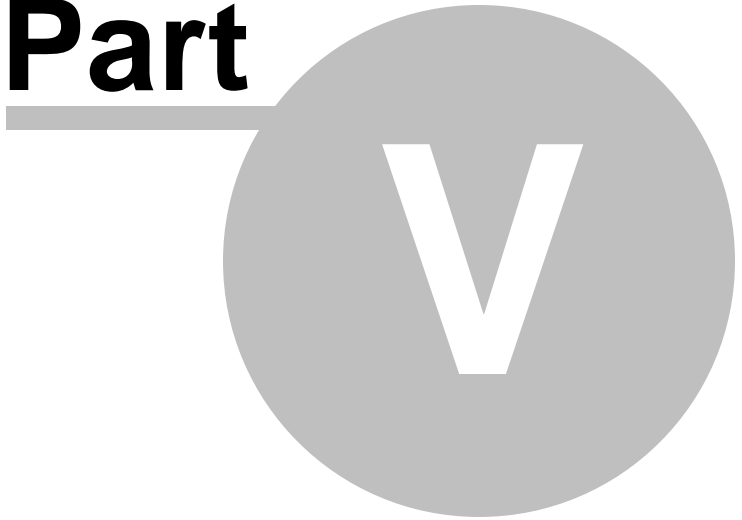
To navigate to a form

- Click on the form name in the Forms navigator pane.

-OR-

The form navigator pane also includes the names of diagrams and word processing text boxes in the casebook. These pages drop down from the form of which they are a part. By selecting one of these items, you can navigate directly to the diagram or word processing editor.

Part



5 Working with diagrams

Scale diagramming is core to all ESD reports. With ESD, you are supplied with intelligent libraries and tools to rapidly create detailed and accurate scenes.

This section contains topics that will help ensure you get the most of the diagram editing window.

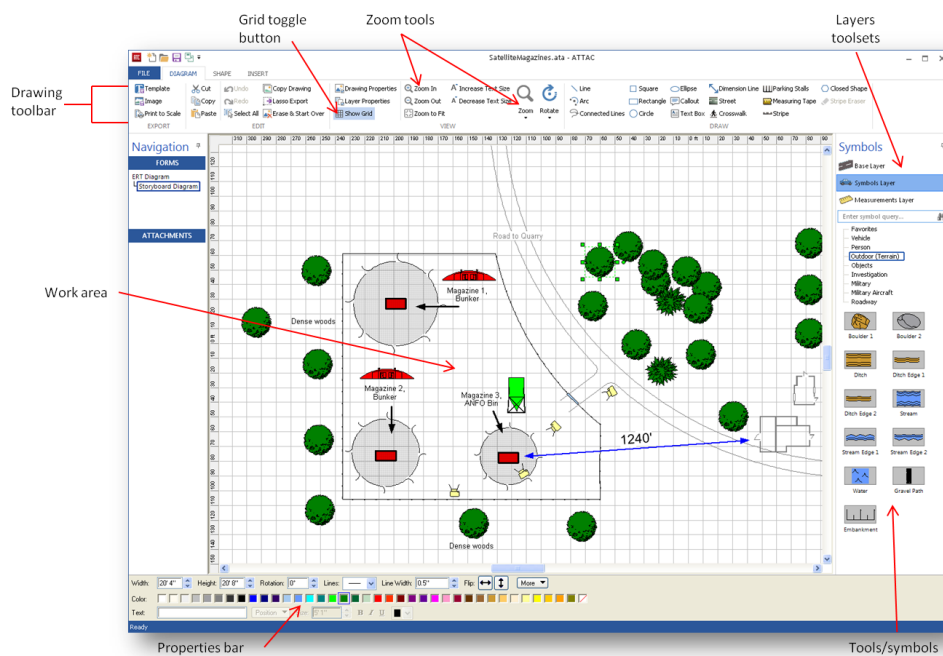
Topics include:

- Getting to know the diagram editing window
- Performing basic tasks
- Working with streets, symbols and field measurements
- Advanced diagram tasks

5.1 Getting to know the diagram editing window

The diagram editing window is where you will diagram the scene of the incident. The work area is the main portion of the diagram editing window, where you will draw/edit your diagram - adding objects, then moving, resizing, and rotating those objects into position.

The illustration below shows the ESD diagram editor window.



Accessing the diagram editor window

You may access the diagram editor window from any diagram form or directly from the form navigator.

To access the diagram work area

- Click "**Click to edit**" (or similar phrase) in the diagram field.

-OR-

On the form navigator, click on the **Diagram** drop-down, under the appropriate form. This will take you directly to the diagram editor window.

Diagram Editor elements

Grid toggle button

To view a measurement grid in the work area, click the grid toggle ("Show Grid") button. Click the button again to deactivate the grid.

Zoom tools

The zoom tools are used to zoom in or out on the drawing.

Work area

The work area is the central portion of the screen; it contains your drawing. This is the area where you will add shapes to the drawing. Shapes that have been added can then be moved, resized, and rotated into position.

Layer selectors

Layer selectors are located to the right of the work area. These selectors are used to move between the different layers of the drawing. Incident scenes are made up of three layers:

The **Base** layer, where you draw structures and streets.

The **Symbols** layer, where you draw furnishings, clues, vehicles and other objects important to the scene.

The **Measurements** layer, which provides tools to accurately position marker points using the baseline/offset or Triangulation measurement method.

Properties bar

The Properties Bar is located at the bottom of the main window. You can modify an object by changing the settings displayed on the Properties Bar. The Properties Bar acts as a smart toolbar - changing as you select different objects in the drawing. For example, select a street shape and the properties of that street are displayed, including the street's name, number of lanes, lane width, and more. Click on a vehicle, and the properties will change to that of the selected vehicle.

Layers toolsets

ESD provides custom toolsets for each layer. The toolsets are located at the right of the main window. Each button provides access to a different toolset containing the available tools and symbols. You will add most of your diagram objects by dragging them from a toolset onto the work area.

Drawing toolbar

If you can't find an object you need in one of the toolsets, you can always create your own with the drawing tools. For ease of access, ESD displays the drawing toolbar directly above the work area.

See Also:

Menus and toolbars

5.2 Performing basic tasks

Before getting started with a drawing, it's a good idea to understand a few of the basic tasks associated with its creation. This section covers those basics.

Topics include:

- Manipulating shapes, symbols and text
- Using handles
- Zooming
- Undoing/redoing
- Starting over
- Working with the clipboard

5.2.1 Manipulating shapes, symbols and text

Here's what you'll find in this topic...

Adding objects	Modifying objects
Deleting objects	Copying objects
Repositioning objects	Resizing objects
Ordering objects	Selecting multiple objects
Aligning multiple objects	Grouping and ungrouping objects

Your diagram will be made up of a wide variety of shapes, symbols, and text. Understanding how to manipulate the various pieces is vital to the success of your drawing.

Adding objects

To add an object

- Hold down the left mouse button and drag the object from the layer toolset onto the work area.

Tip! You can also draw an object using the drawing tools. For more information, see using drawing tools.


To add text to an object

1. Click on the object to select it.
2. Begin typing. The text will automatically appear on or near the object.

- OR -

Type the text in the **Text** box located on the Properties Bar.

To add a text box

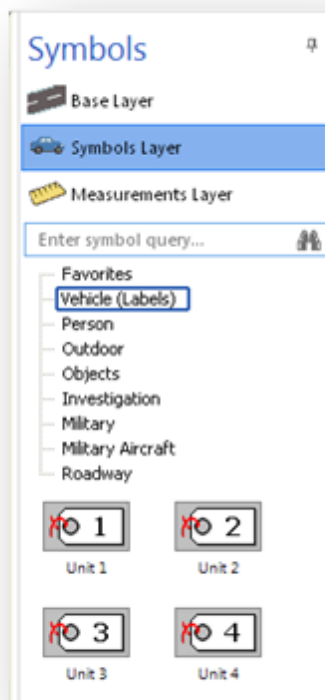
1. Click  (the **Text Box** drawing tool) on the drawing toolbar. Your cursor will turn to a crosshair next to a boxed *A* in the work area.
2. Position the crosshair where you wish the text box to start. Hold down the left mouse button and drag to create the text box. When you release the mouse button, the **Edit Text** window will appear.
3. Type your text.
4. Click **OK**.

To add a unit label to a vehicle symbol

1. Click the **Symbols** layer tab.
2. Click the **Vehicle** toolset and the **Labels** subset.
3. Hold down the left mouse button and drag a label onto the vehicle. A green selection line will indicate placement.

Note You can modify the label once it has been placed: On the Properties Bar, click the **Position** button to change the label position; or change the size or color of the font.

Note You may need to toggle on the Advanced Vehicle toolset before the Labels option appears in your toolset selector. To do this, select File --> Options --> Drawing --> Symbol Collections, and check the box next to **VehicleAdvanced**.



Modifying objects

You can modify an object's properties from either the Properties Bar or the Symbol Properties window.


To modify an object

- Click on the object to select it and change its properties on the Properties Bar.
 - OR -
- 1. Right-click on the object and click **Properties** on the shortcut menu. The Shape/Symbol Properties window will open.
- 2. Make changes as needed.
- 3. Click **OK** to save changes.

Tip!For some objects, more settings are available on the Symbol Properties window than on the Properties Bar.

Deleting objects

To delete an object



1. Click on the object to select it.
2. Click  (the **Cut** button) on the main toolbar.
 - OR -Press the **DELETE** key on your keyboard.

Copying objects

To copy an object

- Hold down the **CTRL** key on your keyboard and drag the object you want to copy.

The original remains intact as you drag the copy. This is the fastest way to copy an object.

 - OR -
- 1. Click on the object to select it.
- 2. Click  (the **Copy** button) on the main toolbar.
- 3. Click  (the **Paste** button) on the main toolbar to paste the object onto the work area.
 - OR -

1. Click on the object to select it.
2. Press **Ctrl + C** to copy it to the clipboard.
3. Press **Ctrl + V** to create a new copy of the object, which you can drag to the desired location (see Repositioning objects).

Note The newly pasted copy of the object will be exactly on top of the original; you will have to drag the copy before you will be able to distinguish it from the original.

Repositioning objects

You can reposition an object by moving, rotating, or flipping it.

To move an object

1. Click on the object you want to move.
2. Hold down the left mouse button and drag the object into position.

- OR -

Use the arrow keys on your keyboard to move the shape up, down, left or right. To accelerate movement, hold down the **SHIFT** key while pressing the arrow key.

To move text

- Hold down the left mouse button on the text box and drag it into position.

- OR -

If the text is linked to a symbol (a Unit label for instance), click the **Position** button on the Properties Bar until the text appears where you want it.

To rotate an object

1. Click on the object to select it.
2. Drag the Circle Handle to rotate it.

Tip! Hold down the **CTRL** key on your keyboard while rotating the symbol to constrain the rotation angle to multiples of 15 degrees.

- OR -

1. Right-click on the object.
2. Point to **Rotate Left** or **Rotate Right** on the shortcut menu and then select the number of degrees.

- OR -
 1. Select the object.
 2. Enter the rotation angle in the **Rotation** box on the Properties Bar.

To flip an object

1. Right-click on the object.
2. Point to **Flip** on the shortcut menu and then click **Horizontal** or **Vertical**.

- OR -
 1. Click on the object to select it.
 2. On the Properties Bar, click the **Flip** button to flip the object in the direction indicated by the arrow.



Resizing objects

You can resize an object using its Square Handles. Some shapes provide dimension items on the Properties Bar and allow you to set the object's dimensions by entering the desired values.

To resize an object

1. Click on the object to select it.
2. Drag the Square Handles to adjust its size.

- OR -

Enter the shape's actual dimensions in the **Length**, **Width**, or **Height** box on the Properties Bar.

Ordering objects

ESD displays objects in the order they are added to the drawing. When two objects overlap, the object added first will appear to be under the object added later. You can, however, arrange an object so that it is in front of or behind another object, despite placement order.

Note The above does not apply to streets.

To arrange an object

1. Right-click on the object.
2. On the shortcut menu, point to **Arrange** and then click **Bring to Front** or **Send to Back**.

Note You can only change the order of objects that are on the same layer. Objects on the Base layer will always appear under objects on the Symbols layer.

Selecting multiple objects

To select multiple objects at once, you can drag a selection box around the objects. This is useful for deleting, copying, moving, aligning, or grouping multiple objects.

Note You can only select objects that are on the same layer.

To select multiple objects

1. Click in an empty area of the drawing.
2. Hold down the left mouse button and drag the pointer across the work area.
A selection box will appear as you drag.
3. When the box contains the shapes you want to select, release the mouse button.
All shapes within the selection box will be selected.

Tip! You can also select multiple objects by holding down the **SHIFT** key on your keyboard as you click each object.

To select all the objects on a layer

- On the **Edit** menu, click **Select All**.

Aligning multiple objects

You can align objects at their left, right, top, or bottom edges.

Note You can only align objects that are on the same layer.

To align multiple objects

1. Select the objects you want to align. See "Selecting multiple objects."
2. Right-click on an empty area. Do NOT right-click on the objects or you will lose your multiple selection.
3. On the shortcut menu, point to **Align** and then click **Left**, **Right**, **Top**, or **Bottom**.

Grouping and ungrouping objects

You can group objects together so they move and act as one, or ungroup an object to modify its components.

Note You can only group objects that are on the same layer.

To group objects

1. Select the objects you want to group together. See "Selecting multiple objects."
2. Right-click on an empty area. Do NOT right-click on the objects or you will lose your multiple selection.
3. On the shortcut menu, click **Group**.

To ungroup an object

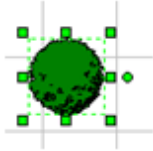
1. Right-click on the object.
2. On the shortcut menu, click **Ungroup**.

See Also:

Using Handles

5.2.2 Using handles

Handles are the small green shapes that appear when you select an object. You can use handles to resize, rotate, and curve objects.



Using handles

ESD uses four types of handles: Square, Diamond, Triangle, and Circle.

Square: Resizes or relocates the section of the object near the handle.

Tip! On rectangular objects, drag a corner handle to resize the object proportionally in both directions. Drag a middle handle to stretch the object in one direction only.

Diamond: Creates a curve between the two nearest Square Handles.

Triangle: Adjusts a portion of an object in the direction indicated by the triangle. For example, the end Triangle Handles on the crosswalk shape adjust the length of the crosswalk lines individually, and the middle Triangle Handles adjust the crosswalk's width.

Circle: Rotates the object without changing its shape.

To use a handle


1. Move the mouse pointer over the handle.
2. Hold down the left mouse button and drag the handle.

5.2.3 Zooming


You can zoom in on your drawing to see more detail or zoom out to provide more drawing space in the work area. Another useful zoom option is **Zoom To Fit**, which puts your entire drawing in view, as large as possible.

Zooming in and out of the work area

To zoom in to the work area

- Click  (the **Zoom In** button) on the main toolbar; this will zoom in to the drawing, making images appear larger on your screen.

To zoom out from the work area

- Click  (the **Zoom Out** button) on the main toolbar; this will zoom out from the drawing, making images appear smaller on your screen.

Tip! You can also zoom in or out by rolling your mouse wheel. (You may need to hold down the **CTRL** key while rolling the wheel. If this does not work, see the documentation provided with your mouse.)

To fit the drawing to fill the work area

- Click  (the **Zoom to Fit** button) on the main toolbar.

Using the lasso zoom


To zoom in on a particular area

- Click the **Lasso Zoom** button under the Zoom tool and drag a rectangle around the object(s) you wish to zoom in on. Repeat as necessary.

To Return to normal view click  (the **Zoom to Fit** button).


Using lasso print/export

To zoom to an area for print

1. Click  (the **Lasso Export** button) on the main toolbar and drag a rectangle around the object(s) you wish to print.
2. Click the **Print** button, displayed above the lasso rectangle.
3. Select correct printing options (printer, number of copies, etc.)

4. Click **Print**.

To export an area of the drawing as an image file

1. Click  (the **Lasso Print/Export** button) on the main toolbar and drag a rectangle around the object(s) you wish to export.
2. Click the **Export** button, displayed above the lasso rectangle.
3. Select the file location in which you wish to save your file.
4. Name the file.
5. Select the desired file format.
6. Click **Save**.

See Also:

Printing a casebook

Exporting a drawing

5.2.4 Undoing/redoing


If you take an action and then change your mind, you can undo it. If you undo an action and then change your mind, you can redo it.

To undo an action

- Click  (the **Undo** button) on the main toolbar.

- OR -

Press **CTRL + Z**.

Tip! You may undo any number of actions by continuing to click  (the **Undo** button) on the main toolbar.


To redo an action


- On the **Edit** menu, click  (the **Redo** button).

5.2.5 Starting over

You can erase the current scene and start over with a new scene.

To start over

1. On the **Scene** menu, click  (the **Erase & Start Over** button). The **New Scene** window will appear.
2. Select a new drawing template (Optional).
3. Click **OK**.


Tip! If you change your mind and wish to return to the original drawing, click  (the **Undo** button) on the main toolbar.

Note The Erase & Start Over command replaces the contents of the current drawing. If your casebook contains multiple drawings, the other drawings in the casebook will remain unchanged.


5.2.6 Working with the clipboard

The clipboard makes it easy to duplicate objects, move objects from one layer to another, or copy objects or even an entire drawing from ESD to another program.

To duplicate an object using the clipboard

1. Click on the object to select it.
 2. On the toolbar for the **Shape** or **Diagram** tab, click **Copy**.
- OR-
- Click  (the **Copy** tool) on the main toolbar.
3. On the toolbar for the **Shape** or **Diagram** tab, click **Paste**.

-OR-

Click  (the **Paste** tool) on the main toolbar.


To create additional copies, repeat the **Edit, Paste** commands.

Tip! The quickest way to duplicate a shape is to select the shape, hold down the **CTRL** key on the keyboard, and then drag the shape with the mouse. As you begin to drag the shape, ESD will make a duplicate of the shape. The mouse will drag the duplicate, leaving the original shape unchanged.

To move an object from one layer to another


1. Click on the object to select it.
2. On the toolbar for the **Shape** or **Diagram** tab, click **Cut**.

-OR-

Click  (the **Cut** tool) on the main toolbar.

3. Navigate to the destination layer.
4. On the toolbar for the **Shape** or **Diagram** tab, click **Paste**.

-OR-

Click  (the **Paste** tool) on the main toolbar.

To copy an image of the drawing to another program

1. On the toolbar for the **Diagram** tab, click the **Copy Drawing** button.
2. Switch to the other program using the taskbar.

- OR -

Start the program using the Start menu.

3. In the destination program, click **Paste** on the **Edit** menu.

5.3 Working with streets, symbols and field measurements

In most cases, ESD divides your diagram drawing into three layers. The layers tabset, located along the right side of the work area, allows you move between the layers of your drawing.

Note The layers noted above apply to most diagram drawings. There are, however, exceptions to the rule. If you are using a drawing template that is focused in scope, such as a Circuit or Injury, layers will vary.

For example, if you are creating a Personal Injury drawing using one of the templates supplied with ESD, the drawing layers will be **Person** and **Labels**. The person outline will be on the Person layer; and you will use the Labels layer to add symbols for bruises, broken bones, burns or other injury marks.

This section helps you make the most of each diagram layer.

Topics include:

- Base layer
- Symbols layer
- Measurements layer

5.3.1 Base layer

You will begin your new scene drawing on the Base Layer. The Base Layer is the foundation of your drawing - it is where you draw and edit streets.

To view the base layer

- Click the **Base Layer** tab in the **Symbols** panel to the right side of the work area.

Buttons for Streets and other tools are located to the right of the main window. Each button provides access to a different toolset.

Tools and tool subsets are located in the window below the toolset buttons. You will add most of your drawing's objects by dragging them from a toolset onto the work area.

Not e It is a good idea to complete as much of the Streets Layer as possible before adding other symbols.

This topic covers the major tasks associated with the base layer.

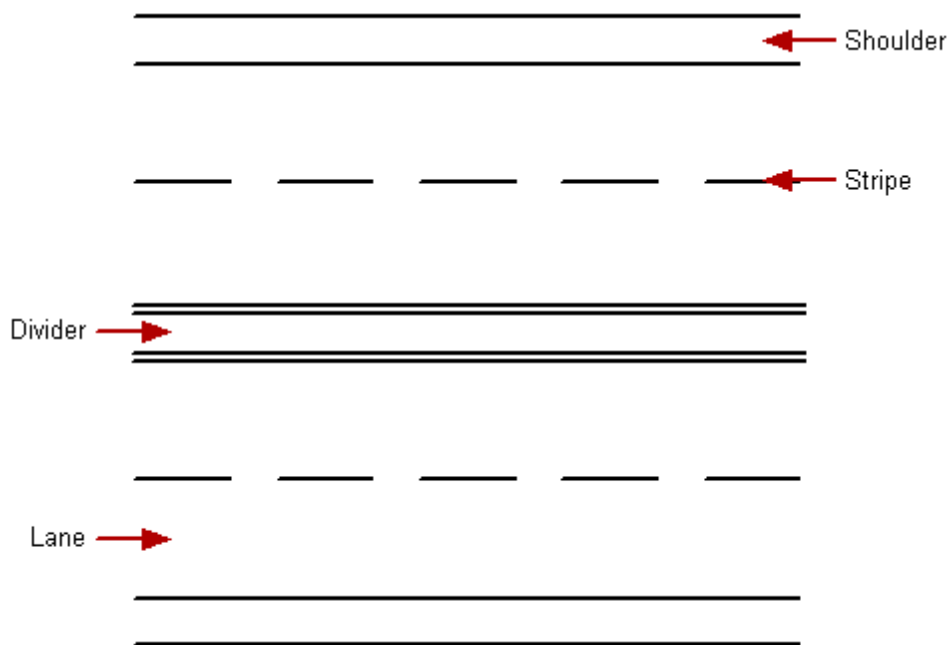
Topics include:

- Streets
- Lanes & Shoulders
- Dividers
- Stripes
- Labels

5.3.1.1 Streets

Here's what you'll find in this topic...	
Adding a street	Segmenting a street
Curving a street	Offsetting a street
Moving a street	Naming a street
Modifying a curb return	Adding a crosswalk
Adding parking stalls	

In ESD, streets are composed of lanes, dividers, stripes, and shoulders. When you click on a street, the entire street operates as an intelligent shape; the changes you make with the mouse affect the entire street.



If the scene includes streets, laying out your street design should be your first step.

Note In most cases, streets should only be placed on the Base Layer. An overpass is one exception to this rule. When you draw an overpass on the Symbols layer, the overpass appears over any streets on the Base Layer.

Modifying street components

You can modify a component of the street, such as a lane, stripe, or shoulder.

To modify a street component

1. Click on the street to select it.
2. Click the street component you want to change. It will become highlighted and its settings will appear on the Properties Bar below the work area.
3. Change the settings on the Properties Bar.

Note If you try to move or resize a part of the street by dragging it, the entire street shape will move.

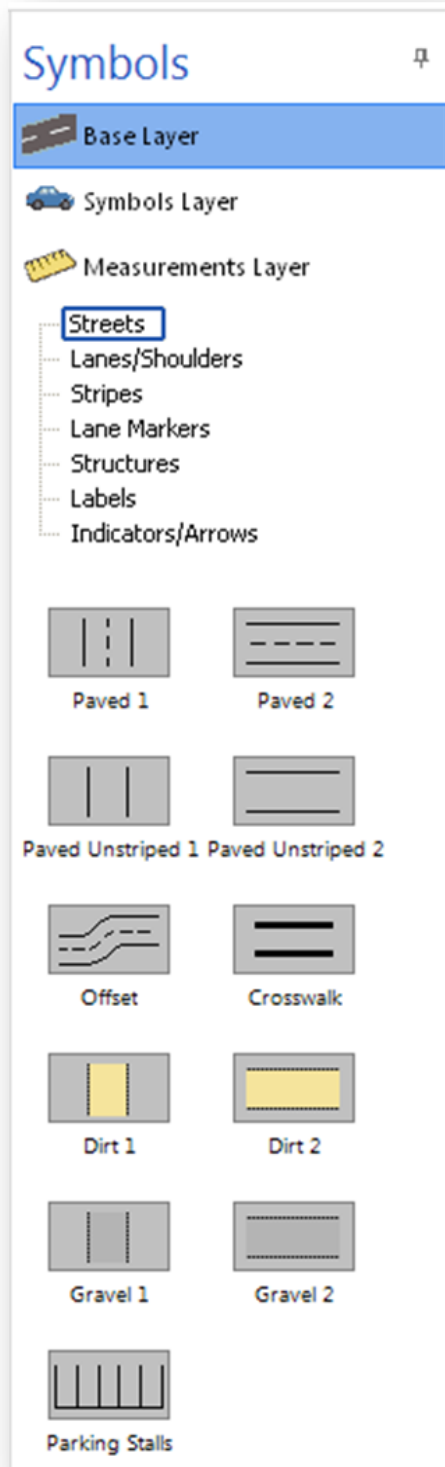
Adding a street

You can add a new street using a street symbol or draw the street using the drawing tools.


Note Before adding a street, be sure you are on the Base Layer. To view the Base Layer, click the **Base Layer** toolset link in the Layer Selector.

To add a street using a street tool

1. Click the **Streets** toolset.
2. Hold down the left mouse button and drag the **Vertical**, **Horizontal**, or **Offset** tool onto the work area.



To draw a street

1. Click  (the **Streets** drawing tool) on the drawing toolset. The pointer changes to a small street outline next to a crosshair.
2. Position the crosshair where you want the street to start.
3. Drag the crosshair where you want the street to end.
4. Release the mouse button.

Curving a street

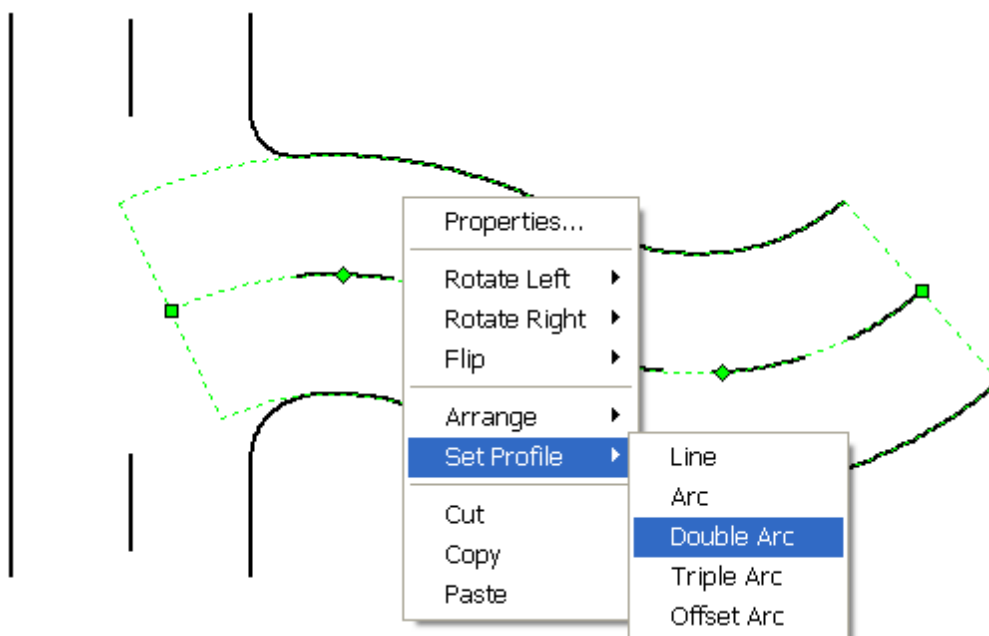
You can add one curve or multiple curves to a street.

To add one curve

- Click on the street to select it. Drag the middle Diamond Handle to add a curve.

To add multiple curves

1. Right-click on the street.
2. On the shortcut menu, point to **Set Profile** and then click **Double Arc** or **Triple Arc**, depending on how many curves you need.
3. Drag the Diamond Handles to increase or decrease the curves.



To curve a street using chord and middle ordinate measurements

If chord length and middle ordinate measurements are known for one of the street's stripes, you can accurately curve the street using these values.

1. Click on the street to select it.
2. Click on the stripe for which chord length and middle ordinate values are known. Green handles will appear on either side of the stripe.
3. Enter the chord length and middle ordinate values on the stripe's Properties Bar.

Segmenting a street

If you need to draw a street with multiple curves - a winding road, for instance - you may wish to segment the street.

To segment a street

1. Click on the street you wish to segment.
2. Right-click on the middle Diamond Handle.
3. Scroll down menu and click **Split Segment**.

To merge a previously segmented street

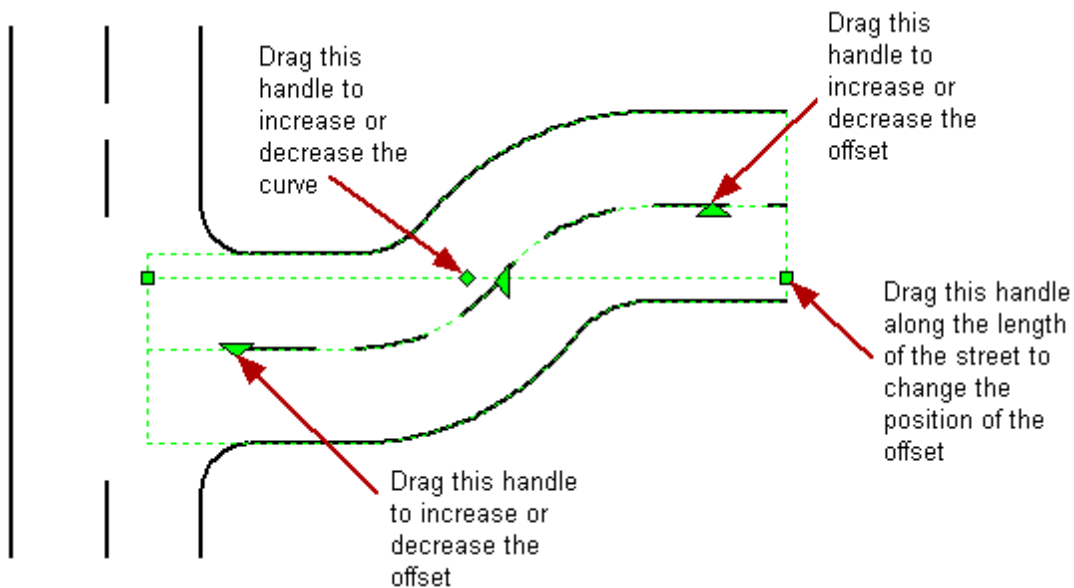
1. Click on the street you wish to merge.
2. Right-click on the Square Handle where the segments connect.
3. Scroll down menu and click **Merge Segments**.

Offsetting a street

You also have the option to create an offset street for curvy roads.

To offset a street

1. Right-click on the street.
2. On the shortcut menu, point to **Set Profile** and then click **Offset Arc**.



Tip!An offset street has two middle handles, however, one handle may appear on top of the other. If this happens, simply drag the middle handle that is in view to view the other handle.

Moving a street

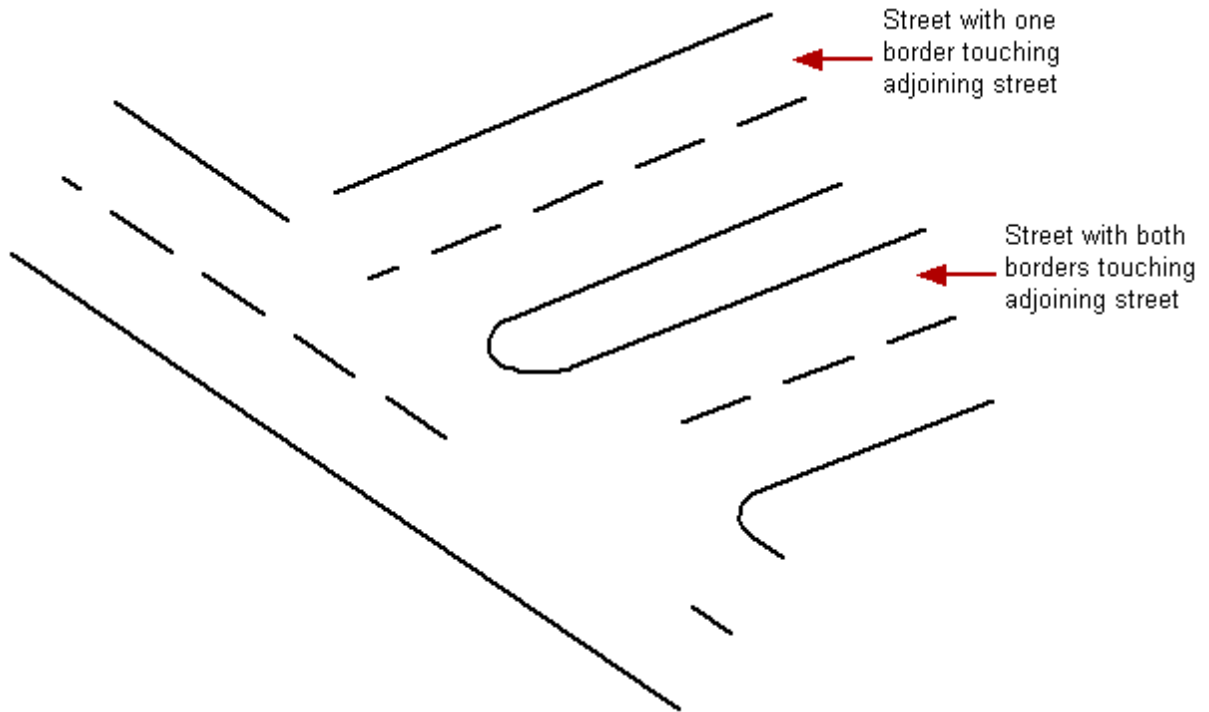
You can move the whole street or one end of a street.

To move the whole street

1. Click on the street to select it.
2. Hold down the left mouse button and drag the street to the desired location.

If the street touches another street, ESD automatically merges the two streets together once you release the left mouse button.

Tip!When moving a street shape to join another, be sure to position the street so both street borders touch the other street. If only one border touches the other street, the stripes may not have the desired appearance.



To move one end of a street

1. Click on the street to select it.
2. Use the Square Handle on the end of the street to drag it to the desired location.

The street realigns itself between the two Square Handles.

Naming a street

To name a street

1. Click on the street to select it.
2. Type the name of the street.

The name you enter will appear on the work area, as well as on the Properties Bar.

To reposition the name

- Hold down the left mouse button on the text box containing the name you want to move, and drag it anywhere inside or near the street shape.

To modify the name

- Click on the name to select it and then change the settings on the Properties Bar.

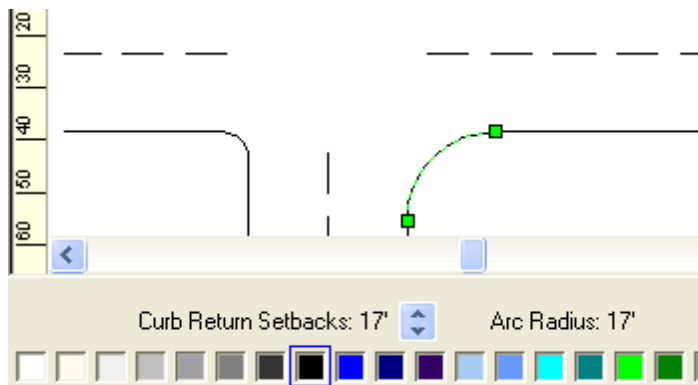
Modifying a curb return

ESD automatically places a standard curb return between two streets that intersect. You can modify this standard curb.

To modify a curb return

1. Click the curb return to select it. Two Square Handles appear.
2. Drag the handles up or down the street until the curb return has the desired shape.

Tip!For precise placement, adjust the setback value using the increment/decrement buttons on the Properties Bar, or watch the **Setbacks** measurements on the Properties Bar as you drag the handles.



Tip!To hide a curb return, change its color to **Transparent** on the Properties Bar.

Adding a crosswalk

You can add a crosswalk using a symbol or draw the crosswalk using the drawing tool.


Tip!The best way to add a crosswalk is to use the crosswalk symbol. When you drag the symbol onto a street, it automatically aligns itself with the street.

To add a crosswalk using the symbol

1. Click the **Streets** toolset on the Base Layer.
2. Drag the **Crosswalk** onto the street.

Note The crosswalk will automatically "snap" to the sides of the street for easy alignment. If, for some reason, you wish to change this behavior, uncheck the **Snap to Street Borders** box on the Properties Bar.

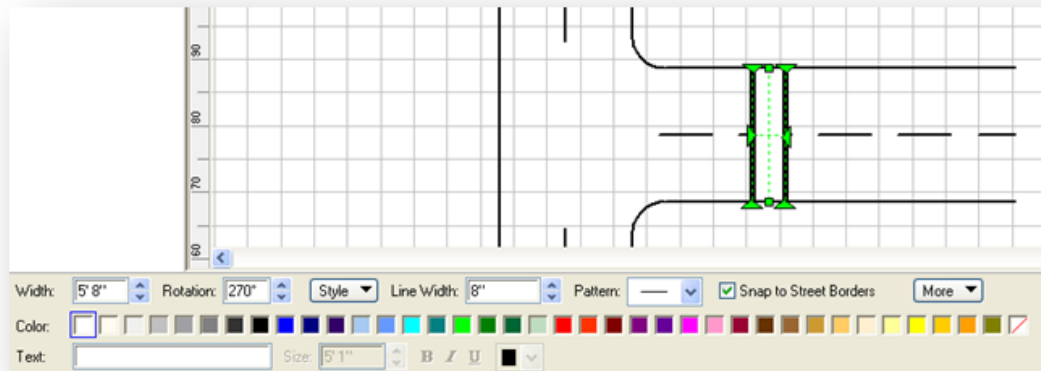
To draw a crosswalk

1. Click  (the **Crosswalk** drawing tool) on the drawing toolbar. The pointer changes to a crosshair.
2. Position the crosshair where you want the crosswalk to start.
3. Drag the crosshair where you want the crosswalk to end.
4. Release the mouse button.

To modify a crosswalk

You can modify a crosswalk in the following ways:

- Adjust the crosswalk's length using the Square Handles.
- Adjust the crosswalk's width using the middle Triangle Handles.
- Adjust each crosswalk line's length independently using the end Triangle Handles.
- Rotate the crosswalk into position using the Circle or Square Handles.
- Change the crosswalk style and modify line color, line pattern, line width, crosswalk width, interior color, and more on the Properties Bar.




Adding parking stalls

You can add parking stalls using a symbol or draw the parking stalls using the drawing tool.

To add parking stalls using a symbol

1. Click the **Streets** toolset on the Base Layer.
2. Drag the **Parking Stalls** onto the work area.

To draw parking stalls

1. Click  (the **Parking Stalls** drawing tool) on the drawing toolbar. The pointer changes to a crosshair.
2. Position the crosshair where you want the parking stalls to start.
3. Drag the crosshair where you want the parking stalls to end.
4. Release the mouse button.

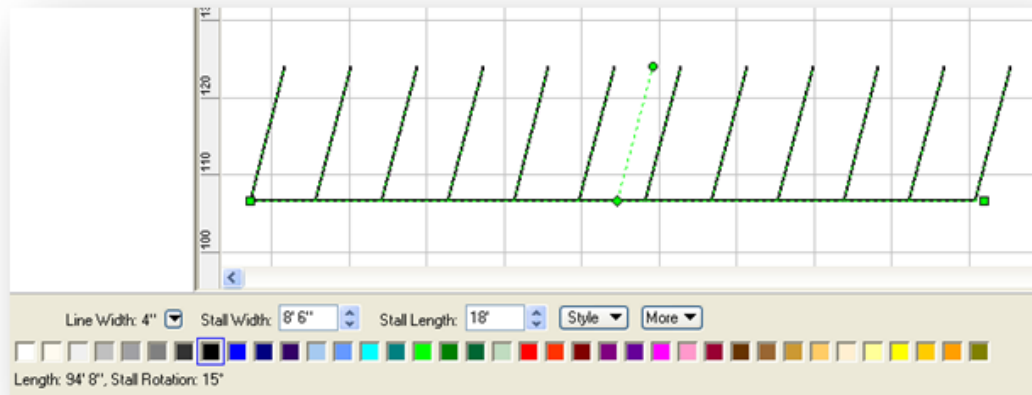
To modify parking stalls

You can modify parking stalls in the following ways:

- Change the number of vehicle stalls and rotate the parking stalls into position using the Square Handles.
- Change the angle of the parking stalls using the Circle Handle (the angle appears

on the status bar).

- Curve the parking stalls using the Diamond Handle.
- Modify color, line width, stall width, length, style, and more, on the Properties Bar.



See Also:

Lanes & Shoulders

Dividers

Stripes

Adding an overpass

Drawing unusual street layouts

5.3.1.2 Lanes & Shoulders

Here's what you'll find in this topic...	
Adding a lane	Removing a lane
Resizing a lane	Adding a turn bay
Adding lane markings	Adding shoulders
Removing a shoulder	Adjusting shoulder width

Lanes

You can draw streets with any number of lanes and adjust the width of each lane individually.

Adding a lane

You can add several different types of lanes to a street.

To add a lane

1. Click on the street to select it.
2. On the Properties Bar, click the **Lanes** up arrow.

- OR -
 1. Click the **Lanes/Shoulders** toolset on the Base Layer.
 2. Drag **Add A Lane**, **Add a Bike Lane**, -OR- **2 Way Left Turn Lane** onto the street.

Removing a lane

There are several different methods for removing a lane.

To remove a lane

- Click the **Lanes/Shoulders** toolset on the Base Layer. Drag the **Remove** tool onto the lane you want to remove.

- OR -

Click on the street and then click on the lane you want to remove. A green selection stripe will appear down the center of the lane. On the Properties Bar, click **Remove Lane**.

- OR -

Click on the street to select it. On the Properties Bar, click the **Lanes** down arrow.

Resizing a lane

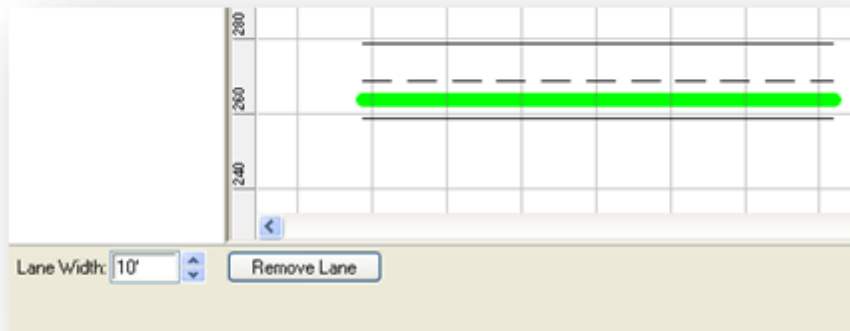
You can resize all the lanes on a street at one time, or resize one single lane.

To resize all lanes on a street

1. Click on the street to select it.
2. On the Properties Bar, click the up or down arrows or manually change the values for the **Lane Width** box.

To resize one lane

1. Click on the street to select it.
2. Click on the lane you want to resize. A green selection stripe will appear down the middle of the lane.
3. On the Properties Bar, click the up or down arrows or manually change the values for the **Lane Width** box.



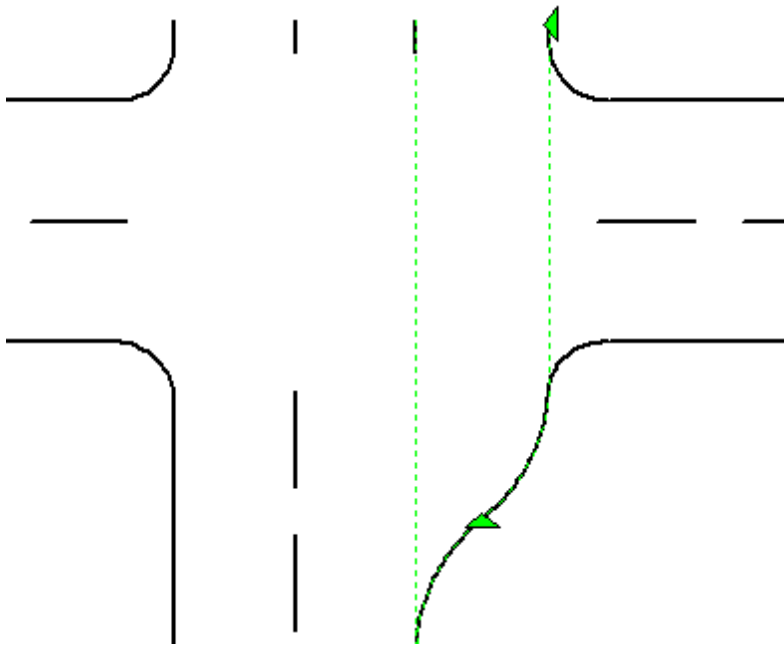
Adding a turn bay

You can add a right turn bay or a left turn center bay to a street.

To add a right turn bay

1. Click on the street to select it.
2. Click on the solid stripe on the right side of the street.
3. Drag the end Triangle Handle toward the right to create the turn bay.
Use the middle Diamond Handle to lengthen or shorten the turn bay.

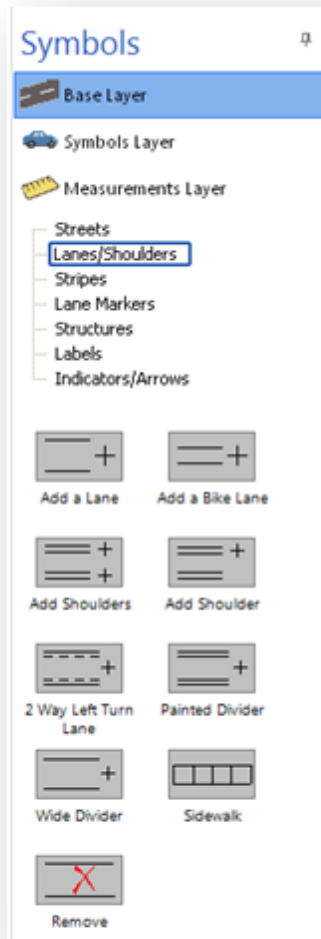
Tip! You may need to lengthen the street before you can lengthen the turn bay.

EXAMPLE: Right turn bay**To add a left turn center bay**

1. Click on the street to select it.
2. Click on the rightmost stripe in the center lane.
3. Use the end Triangle Handle to drag the stripe over, usually so it overlaps the stripe to the left.
4. Use the middle Diamond Handle to lengthen or shorten the turn bay.

Adding lane markings

You may add lane and divider markings, such as directional arrows, to your drawing.



To add lane markings

1. Click the **Lanes/Shoulders** toolset on the Base Layer.
2. Hold down the left mouse button and drag a marking symbol onto the lane or divider. Use the symbol's handles to resize and rotate the marking as needed.

Shoulders

You can draw streets with one or two shoulders. Shoulders can represent street shoulders or sidewalks.

Adding shoulders

You can place shoulders on one or both sides of the street.

To add shoulders to both sides of the street

1. Click the **Lanes/Shoulders** toolset.
2. Hold down the left mouse button and drag the **Add Shoulders** tool onto the street.

To add a shoulder to one side of the street

1. Click the **Lanes/Shoulders** toolset.
2. Hold down the left mouse button and drag the **Add Shoulder** tool onto one side of the street.

Removing a shoulder

If you decide you don't want the shoulder you added, you can always remove it.

To remove a shoulder

1. Click the **Lanes/Shoulders** toolset.
 2. Hold down the left mouse button and drag the **Remove** tool onto the shoulder.
- OR -
1. Click on the street to select it and click the shoulder you want to remove. A green selection stripe will appear down the middle of the shoulder.
 2. On the Properties Bar, click **Remove Shoulder**.

Adjusting shoulder width

You can adjust the width of each shoulder individually.

To adjust shoulder width

1. Click on the street to select it and click the shoulder you want to adjust. A green selection stripe will appear down the middle of the shoulder.
2. On the Properties Bar, alter the value in the **Shoulder Width** box.

5.3.1.3 Dividers

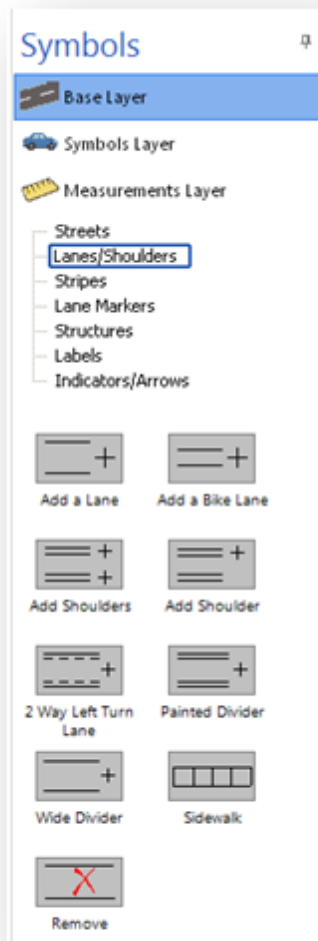
A divider is simply a lane bordered by special stripes.

Adding a divider to a street

You have a couple options to choose from when adding a divider.

To add a divider using the dividers toolset

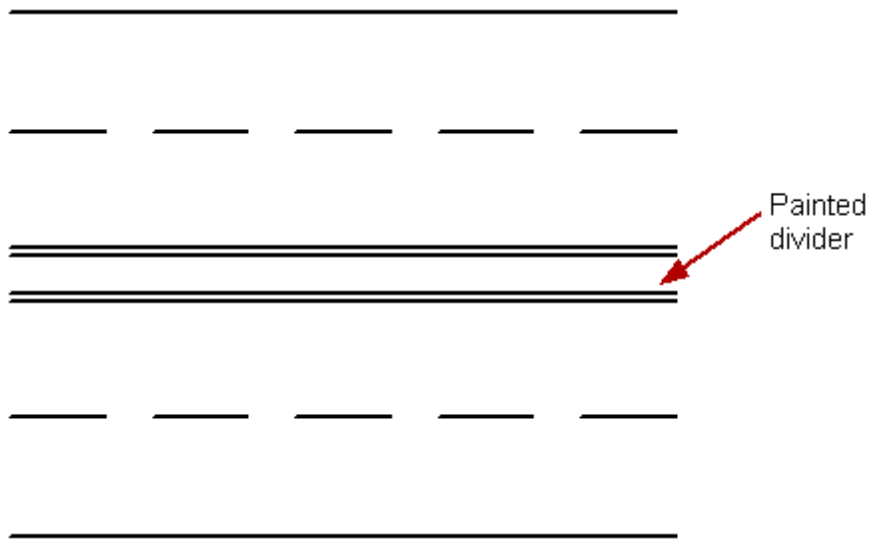
1. Click the **Lanes/Shoulders** toolset on the Base Layer.
2. Hold down the left mouse button and drag one of the divider tools over the street. A selection stripe will appear down the street, indicating position.
3. Release the mouse button. A divider will appear on the street.



To add a divider using the properties bar

1. Click on the street to select it.
2. On the Properties Bar, click the **Divider** button.
3. Choose one of the divider options on the popup menu.

EXAMPLE: Painted divider



Changing the width of the divider

To change the width of a divider

1. Click on the street to select it.
2. Click in the divider to select it. A green selection stripe will appear down the middle of the divider.
3. On the Properties Bar, click the **Divider Width** arrows until you reach the desired width.

-OR-

Enter a value in the **Divider Width** entry box on the Properties Bar. To specify feet and inches enter a space between the feet and the inch values.

Removing a divider

ESD provides a couple of different methods for removing a divider.

To remove a divider

1. Click the **Dividers** toolset on the Base Layer.
2. Hold down the left mouse button and drag the **Remove** tool onto the divider you want to remove.

-OR-

1. Click on the street to select it.
2. Click in the divider you want to remove. A green selection stripe will appear down the center of the divider.
3. Click the **Remove Divider** button on the Properties Bar.

5.3.1.4 Stripes

Stripes are the edges of a lane. You can change their appearance, remove them, add independent stripes, or reveal hidden stripes.



Changing a stripe's pattern

You can change the pattern of an entire stripe.

To change a whole stripe

- Click the **Stripes** toolset on the Base Layer. Drag a pattern tool (**Dash**, **Solid**, **Double Solid**, **Dash & Solid**, **Double Dash** or **Hidden**) onto the stripe you want to alter. This is the fastest method.

- OR -

Click on the street and then click the stripe to select it. On the Properties Bar, click the **Pattern** button until the pattern you want appears.

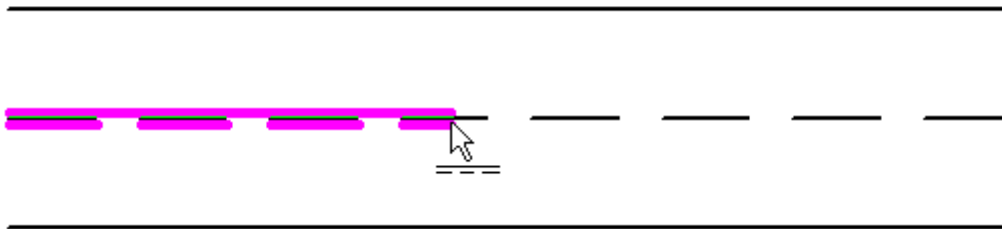
Tip! You can also change a stripe's color on the Properties Bar.

Changing part of a stripe's pattern

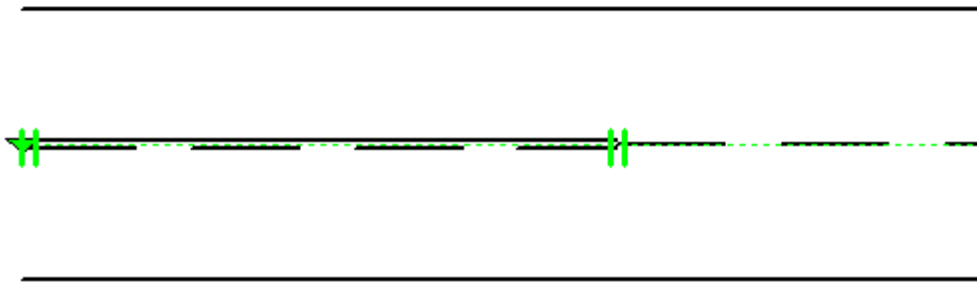
Pattern painters let you paint a section of a stripe with a selected pattern. This is the easiest method for changing part of a stripe. You can also change a section of a stripe by splitting the stripe and applying different stripe patterns to either side. This section describes both methods.

To change part of a stripe (using a pattern painter)

1. Click the **Stripes** toolset on the Base Layer.
2. Double-click on one of the pattern tools (**Dash**, **Solid**, **Double Solid**, **Dash & Solid** -OR- **Double Dash**). The pointer changes to represent the selected pattern.
3. Position the pattern pointer where you want to begin changing the stripe.
4. Hold down the left mouse button and drag the painter over the section of the stripe you want to "paint."
5. Release the mouse button.

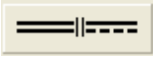


Tip! When painting **Dash & Solid** stripes, the dash appears above or below the stripe, depending on where you position the pointer.



Tip! Once you have painted a stripe, double green bars appear. Drag the double bars handle to reposition the pattern transition point anywhere along the length of the stripe.

To change part of a stripe (splitting a stripe)

1. Click on the stripe you want to split.
2. On the Properties Bar, click  (the **Split Pattern Stripe** button). Double green bars will appear on the stripe.

Tip! Double green bars show where the stripe has been split. You can adjust the location of the split by dragging these bars anywhere along the length of the stripe.

3. Click the **Stripes** toolset. Drag a pattern tool (**Dash**, **Solid**, **Double Solid**, **Dash & Solid** -OR- **Double Dash**) onto the section of stripe you want to alter. This is the fastest method.

- OR -

On the Properties Bar, click **Pattern** until the pattern you want appears on the first part of the stripe; then, click **Pattern 2** until the pattern you want appears on the second portion of the stripe.

Removing a stripe

You can remove an entire stripe or a section of a stripe.

To remove a whole stripe

- Click the **Stripes** toolset. Hold down the left mouse button and drag the **Hidden** tool onto the stripe you want to remove. This is the fastest method.


- OR -

Click on the street and then click on the stripe to select it. On the Properties Bar, click **Pattern** until the stripe disappears.

- OR -

Click on the street and then click on the stripe to select it. Press the **DELETE** key on your keyboard.

To remove part of a stripe

1. Click  (the **Stripe Eraser** drawing tool) on the drawing toolbar.
2. Position the eraser at the point where you want to begin erasing.
3. Hold down the left mouse button and move the eraser over the section of the stripe you want to erase.
4. Release the mouse button.

Tip! Double green bars appear to show where the stripe is erased. You can adjust the hidden section of the stripe by dragging these bars anywhere along the length of the stripe.

5.3.1.5 Labels

You can easily add room or area labels to your scene diagram(s) using ESD's Label tools.



Adding a room/area label

The Base Layer includes a Labels toolset containing several auto-incrementing label tools. These tools are designed to help you label rooms/areas quickly and easily.

To add a room/area label

1. Click the **Labels** toolset on the Base Layer.
2. Select a label style. Hold down the left mouse button and drag the label tool onto the drawing.

Note When you add a label to your drawing, the **Next Label #** automatically increases to the next number; ESD remembers this number for each scene. However, if you delete a label you will need to manually change the Next Label #.

5.3.2 Symbols layer

ESD provides a large selection of pre-drawn symbols and also includes the tools for complete customization, allowing you to modify an existing symbol or draw an object yourself.

Note It is a good idea to complete as much of the Base Layer as possible before adding vehicles and other symbols.

If you are creating a scale drawing and baseline/offset or Triangulation measurements are available from the incident scene, you should proceed to the Measurements layer before adding evidence symbols.

Tools provided by the Measurements layer will enable the accurate placement of marker points you will then use to align skid marks, vehicles, crime scene evidence and other symbols on the Symbols layer. See Measurements layer.

To view the symbols layer

- Click the **Symbols** tab on the layers tabset.

This section covers tasks associated with the Symbols layer. It also includes an overview of the symbol types that may be found in various toolsets on the Symbols layer.

Topics include:

- Working with symbols
- Symbol types
- Symbol examples

5.3.2.1 Working with symbols

Here's what you'll find in this topic...	
Accessing a symbol library	Adding a symbol
Modifying a symbol	Positioning a bubble body
Moving a bubble body part	Adding a counter
Modifying a counter	

General symbol tasks

Accessing a symbol library

Like the Base Layer, the Symbols Layer is organized by category groups, or toolsets. Each toolset contains a symbol library made up of various symbol subsets and/or individual symbols.

To access a symbol library

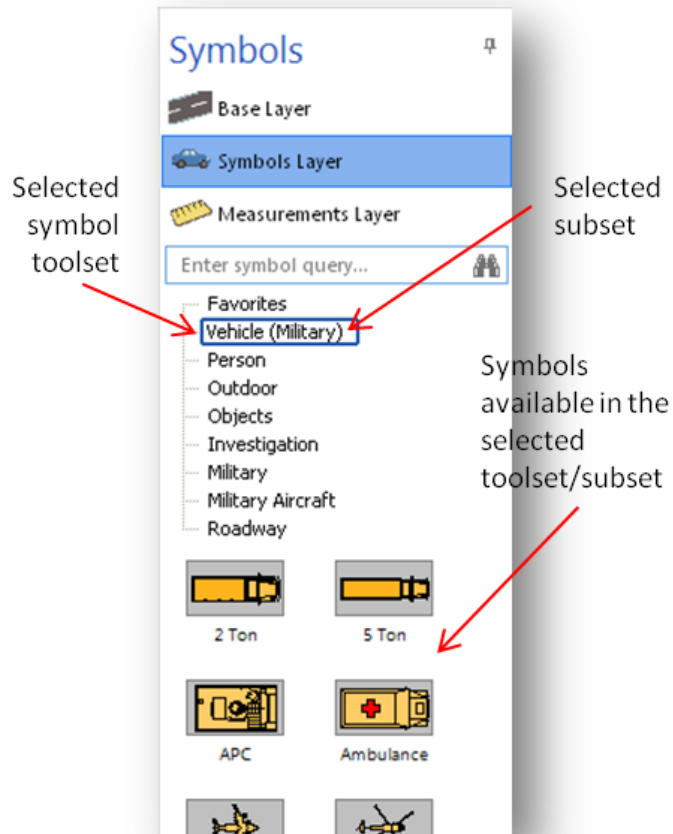
- Click on a toolset button to select it.

The symbol library for the selected toolset will be displayed in the window below the toolset buttons. Click on a subset to view the symbols.

- To return to the subset list, click the selected subset name.

-OR-

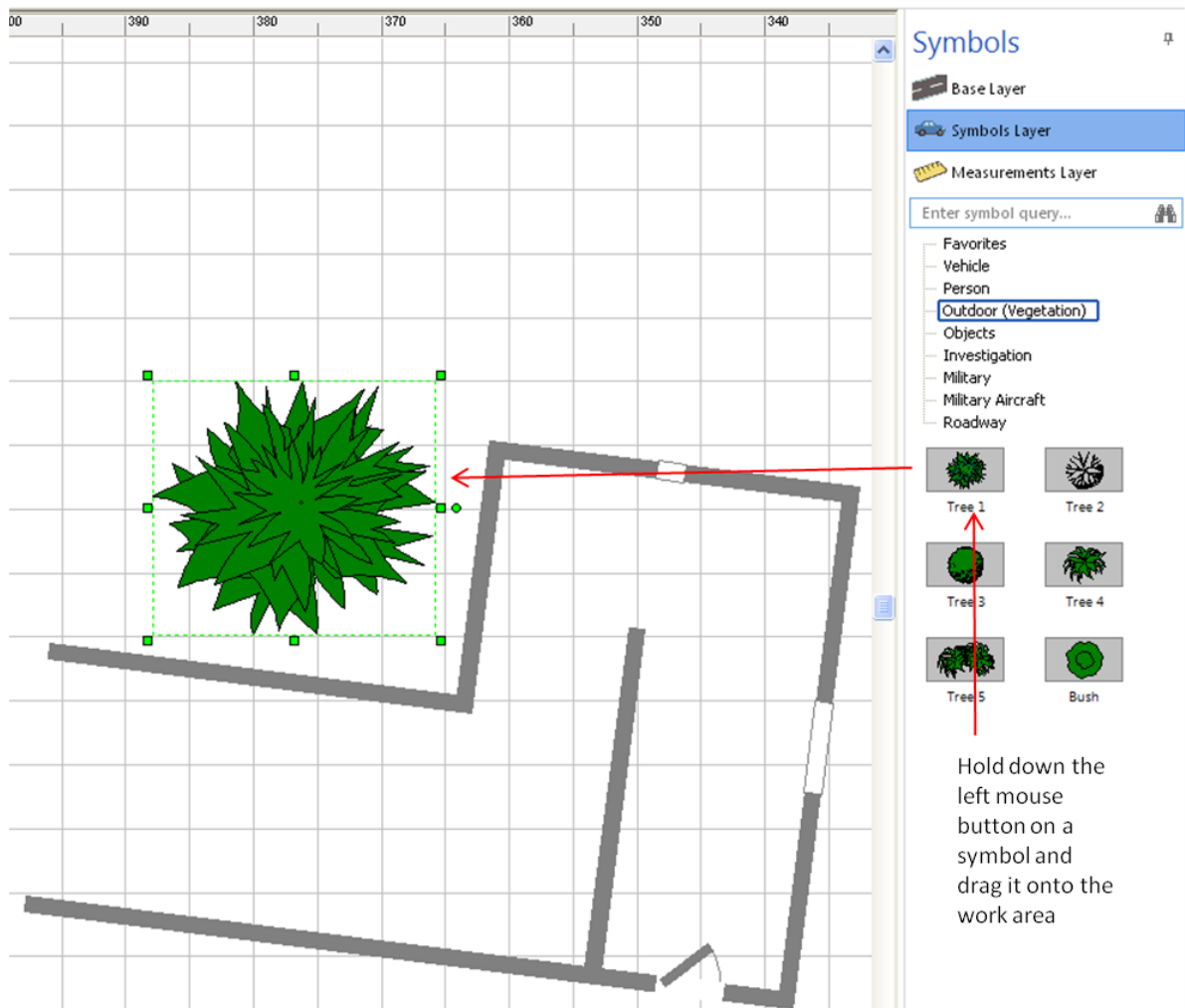
Click on a symbol toolset button to navigate to another symbol library.



Adding a symbol

To add a symbol to the drawing

- Drag the symbol from the symbol library onto the work area.



Modifying a symbol

You have several options when modifying a symbol.

Note Though the Properties Bar is more easily accessed, more settings may be available on the Symbol Properties window for various symbols.

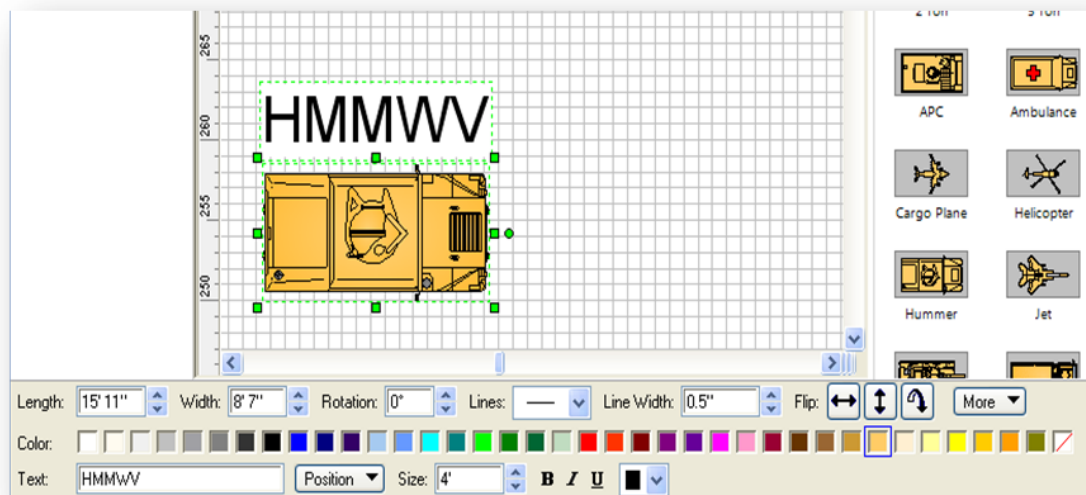
To modify a symbol on the symbol properties window

1. Right-click on the symbol.
2. Click **Properties** on the shortcut menu. The Symbol Properties window will open.
3. Modify properties as needed.
4. Click **OK** to save changes.

To modify a symbol on the properties bar

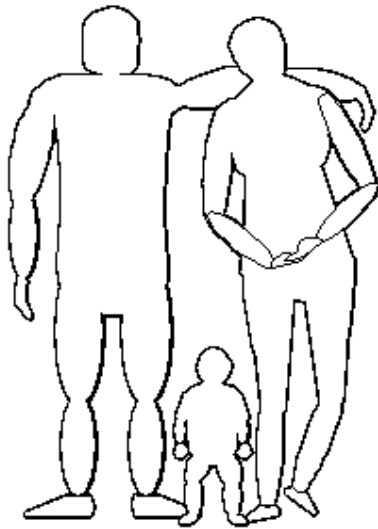
1. Click on the symbol to select it.
2. Modify the symbol's properties on the Properties Bar.

Note The following illustration shows settings that may appear on the Properties Bar when you select a symbol. Settings available on the Properties Bar vary by symbol.

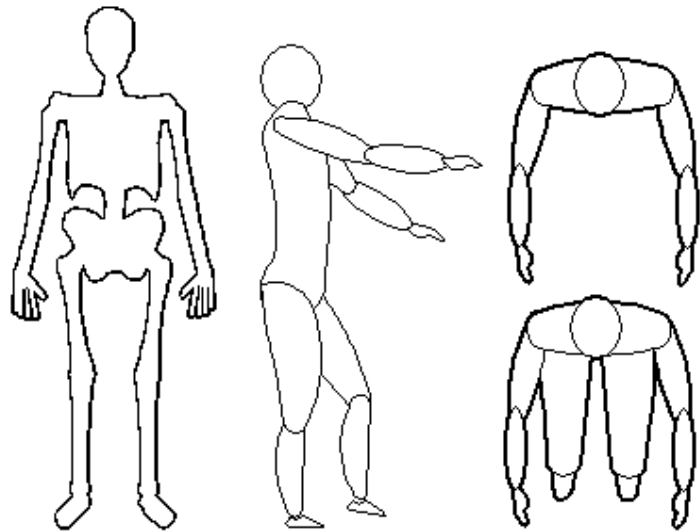


Working with the bubble family

The **Person** toolset contains four highly modifiable body symbols: Man, Woman, Child, and Skeleton. In addition, you may access a Sit/Stand and Side view. With each "Bubble Family" symbol, you can position the body; you can move body parts to the front or the back, or remove body parts completely.



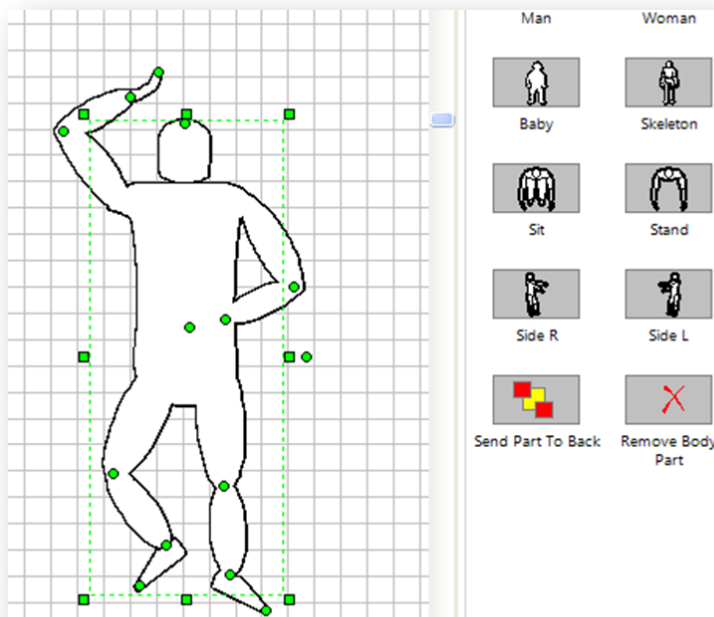
Choose from Man, Woman, or Child bubble figures ...



OR select Skeleton, Sit, Stand, or Side views

Positioning a bubble body

Once a bubble body has been placed on the work area, you can position the body as needed.



Note For consistency, the instructions below are "Bubble" Man specific, but all symbols in the Person toolset function the same.

To place a bubble man

- Hold down the left mouse button and drag the **Man** symbol from the **Person** toolset/**Bubbleman** subset.

Tip! Zoom in on the Bubble Man before positioning the body. For more information, see *Zooming*.

To rotate a bubble body

- Use the external Circle Handle to rotate the entire body.

To reposition a bubble body part

- Use the internal Circle Handles located at the joints of Bubble Man.

Moving a bubble body part

To remove a bubble body part

1. Click the **Person** toolset and the **Bubbleman** subset.
2. Select the **Remove Body Part** tool.
3. Hold down the left mouse button and drag the **Remove Body Part** tool over the body part. A red circle will appear over the body part.
4. Release the mouse button.

To restore a bubble body part that was just removed

- On the Drawing toolbar, click **Undo**.

Note: Once you have saved changes and closed ESD, you will no longer have the option to restore a body part that has been removed.

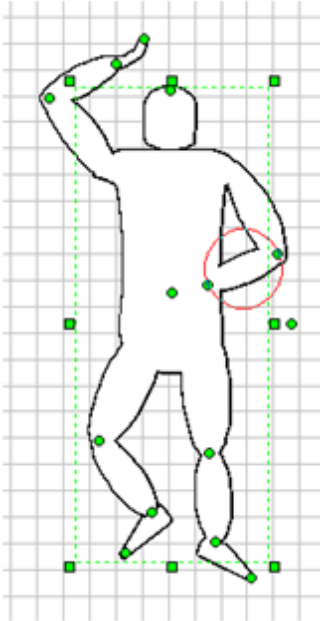
To move a body part to the front

A body part may “disappear” behind Bubble Man’s body- but it doesn’t have to stay that way.

1. Click the **Person** toolset and the **Bubbleman** subset.
2. Select the **Bring Part to Front** tool.
3. Hold down the left mouse button and drag the **Bring Part to Front** tool over

the body part. A red circle will appear over the body part.

4. Release the mouse button.



To move a body part to the back

1. Click the **Person** toolset and the **Bubbleman** subset.
2. Select the **Send Part to Back** tool.
3. Hold down the left mouse button and drag the **Send Part to Back** tool over the body part. A red circle will appear over the body part.
4. Release the mouse button.

Working with counters

Many structures - especially business structures - contain counters of different shapes and sizes. The counter tool is specially designed to produce these shapes.

Adding a counter

Counter symbols and manipulators are located on the Base layer in the Structures toolset.

To add a counter

1. On the Base layer, click the **Structures** toolset and scroll toward the bottom of the toolset.

2. Choose a counter shape closest to your needs - **Counter**, **U Counter**, or **L Counter**.
3. Hold down the left mouse button and drag the counter to the desired location on the work area.

Modifying a counter

Once a counter has been added to the work area you have the ability to modify it.

To rotate a counter

- Use the External Circle Handle to rotate the entire counter.
- OR -

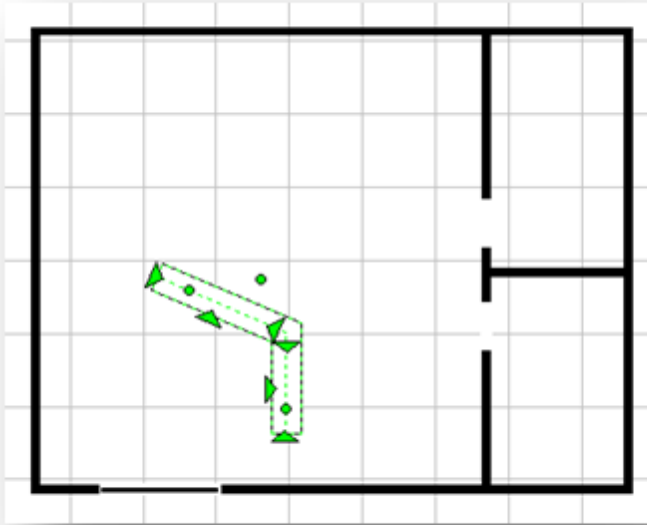
On the Properties bar, click More and choose **Rotate Left** and **Rotate Right** to rotate the counter by the appropriate amount.

To adjust the length and width of counter sections

- Use the Triangle Handles to adjust the length and width of counter sections.

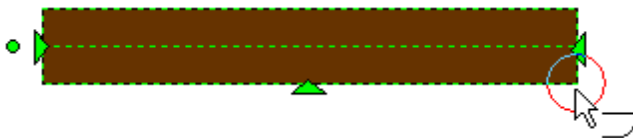
To angle counter sections

- Use the internal Circle Handles to angle counter sections.



To modify counter corners

1. Selected the desired angle tool - **Angled Corner**, **Rounded Corner**, or **Square Corner**.
2. Hold down the left mouse button and drag the tool over the corner of the counter. A Red circle will appear.
3. Release the mouse button.



See Also:

Properties bar

Manipulating shapes, symbols and text

Showing vehicle damage

5.3.2.2 Symbol types

Here's what you'll find in this topic...	
Curving a linear symbol	Segmenting a linear symbol
Offsetting a linear symbol	Drawing a linear symbol
Positioning an articulating symbol	

ESD includes a large selection of pre-drawn symbols - symbols that can be ungrouped and modified. ESD also includes two specialized symbol types: linear and articulating. These symbols have technology that make it easy to add and position them on the diagram.

Linear symbols

Linear symbols can be manipulated much like a street shape - they can be curved, segmented, offset, or drawn using Painter technology. Linear symbols include skid marks, yaw marks, scratches, sidewalks, fences, ditch edges, stream edges, barriers, railings, power lines, and railroad tracks.

Curving a linear symbol

You can add one curve or multiple curves to a linear symbol.

To add one curve

- Click on the linear symbol to select it. Drag the middle Diamond handle to add a curve.

To add multiple curves

1. Right-click on the linear symbol. On the shortcut menu, point to **Set Profile** and then click **Multiple Arc**.
2. Drag the Diamond Handles to increase or decrease the curvature.

Segmenting a linear symbol

You can add segments to a linear symbol (to draw the edge of a winding stream, for example).

To segment a linear symbol

1. Click on the linear symbol you wish to segment.

2. Right-click on the middle Diamond Handle.
3. Scroll down the shortcut menu and click **Split Segment**.

To merge a linear symbol that was previously segmented

1. Click on the linear symbol you wish to merge.
2. Right-click on the middle Square Handle.
3. Scroll down the shortcut menu and click **Merge Segments**.

Offsetting a linear symbol

You can create a linear symbol with an offset.

To offset a linear symbol

- Right-click on the linear symbol you wish to offset. On the shortcut menu, point to **Set Profile** and then click **Offset Arc**.

Tip!An offset symbol has two middle handles. The middle Triangle Handle may appear on top of the Diamond Handle.

Drawing a linear symbol using painter technology

Linear symbols include painter technology - allowing you to draw a complex layout with just a few clicks of the mouse.

To draw a linear symbol using painter technology

1. Double-click on the linear symbol you wish to draw. The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the symbol layer to begin. Click to activate painter mode.
3. Move the mouse to lengthen the symbol (for precise measurement note the Length, below the work area). Click at each corner point.
4. Right-click to end painter mode.

Note Painter technology also applies to structures.

Articulating symbols

Articulating symbols include one or more parts that can be independently positioned

- these include tanks, gates, and bubble bodies.

Positioning an articulating symbol

Articulating symbols give you the ability to rotate or position one part of the symbol, in addition to rotating the symbol as a whole.

To position part of an articulating symbol

- Use the internal green handle located at the end of the part/section you wish to position.

To rotate an articulating symbol

- Use the external green handle to rotate the symbol as a whole.

See Also:

Working with the bubble family

5.3.3 Measurements layer

The Measurements layer provides tools for those who used Triangulation or Baseline/Offset measurement methods to measure the location of evidence at the scene of the incident. This section discusses how to use both measurement tools, as well as gives an overview of the rooftop area tool.

Topics include:

- Triangulation
- Station line
- Area tools

5.3.3.1 Triangulation

The triangulation tool allows you to easily insert data collected at the incident to accurately place evidence on your scene diagram.

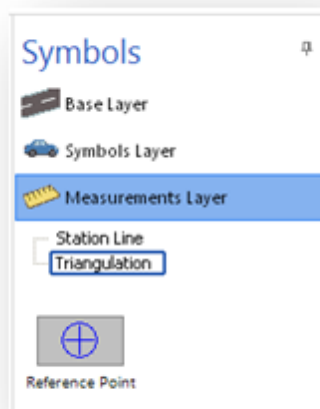
Using triangulation

Once you have placed the symbols on your drawing (the fixed objects from which you measured evidence), you can place the reference points for those objects.

To add reference points

1. Click the **Measurements** layer tab.
2. Hold down the left mouse button and drag the **Reference Point** tool onto the work area. Position it to align with the permanent objects used at the incident scene.
3. Repeat Step 2 to add the second reference point.

Note You must place at least two reference points.



Specifying evidence locations

After positioning the reference points, you can begin specifying the evidence locations measured from those points.

ID	Description	Pt 1	Distance 1	Pt 2	Distance 2	Direction
1	Street to Mag 3	A	540'	B	551' 4"	Shaded
2	Street to Gate	A	248' 7"	C	217' 11"	Unshaded
<input type="text" value="3"/>			0		0	

To remove a measurement point, enter 0 (zero) in both Distance cells.

Enter an ID # or short description for this measurement point.
Press Tab to move forward in the grid.

OK Cancel Help

To specify evidence locations measured from reference points

1. Click on one of the Reference Points to select it.

2. Click the **Edit Measurements** button on the Properties Bar.

- OR -

Right-click on the Reference Point; click **Edit Measurements** on the shortcut menu.

ESD will open the Triangulation **Measurement Points** window. Here you will enter the measurement data collected at the scene of the incident.

Tip! The fastest way to navigate through the measurement point grid is to use the keyboard:

To move forward in the grid

Press Tab.

To move back in the grid

Press Shift+Tab.

To select an item in a drop-down list

Use the down arrow key.

Measurement data includes:

ID

Enter an ID Number or short description for this measurement point. The value entered here will be displayed at the point's position on the diagram.

Description

In a few words, describe the evidence located at the measurement point.

Pt 1

Each reference point in the diagram is labeled with a letter. Select the letter corresponding to the first reference point from which the measurement was made.

Distance 1

Enter the distance from reference point A to the evidence. Include unit designations in the distance if desired (ft, in, m). If no unit is specified, the measurement is assumed to be in feet. To enter the distance in feet and inches, type a space between the feet and inch(es) values.

Pt 2

Select the letter corresponding to the second reference point from which the measurement was made.

Distance 2

Enter the distance from reference point B to the evidence. As with Distance 1, you may include designations (ft, in, m) if you wish. If no unit is specified, the measurement will default to feet. To enter the distance in feet and inches, type a space between the feet and inch(es) values.

Direction

Select **Shaded** or **Unshaded** to identify the evidence item's position relative to reference points A and B.

3. Click **OK** to save measurement data.

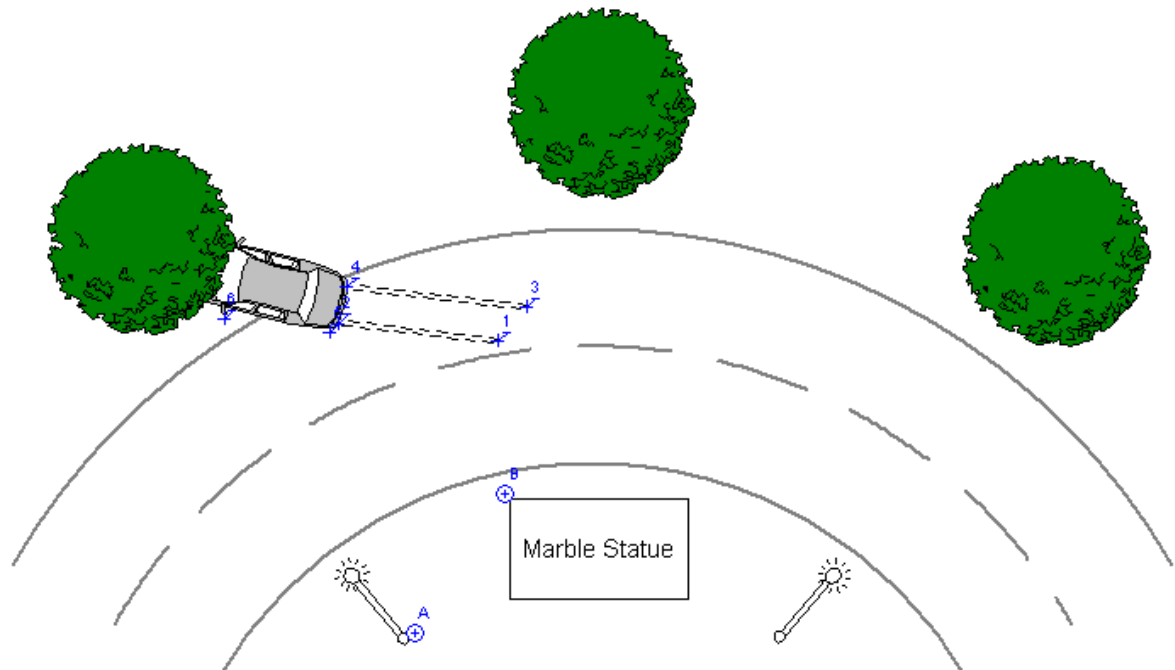
ESD will display a marker point for each pair of measurements entered in the Triangulation Measurement Points window.

Positioning symbols using marker points

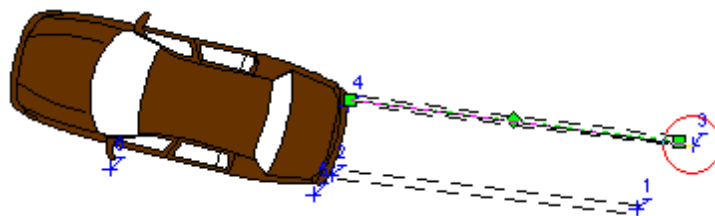
After you complete entry of the measurement data in the Measurement Points window, you can use the marker points to position symbols on the drawing.

To position a symbol

1. Click the **Symbols** layer tab.
2. Select the desired symbol and drag it onto the diagram.
3. Use the symbol handles to stretch, rotate, and drag the symbol to align with the marker points.



Note When positioning skid marks, the ends of the skid mark will "snap" to the marker points. Look for the red circle, indicating placement.



To remove a measurement point

1. Click the **Measurements** layer tab.
2. Open the **Measurement Points** window.
3. Enter 0 (zero) in both **Distance 1** and **Distance 2**.
4. Click **OK**.

To include a table of measurement values in standard print or PDF output

1. On the **Tools** menu, click **Options**.
2. Select the **Print Measurement Items** and check the **Include a table of field measurements in standard print output** checkbox.

3. Click **OK** to save your changes.

To include measurement points in print, PDF, and exported output

1. On the **Tools** menu, click **Options**.
2. Select the **Print Measurement Items** and check the **Include field measurement markers in printed diagram** checkbox.
3. Click **OK** to save your changes.

Note By default, measurement points are not included in printed or exported drawings.

5.3.3.2 Station line

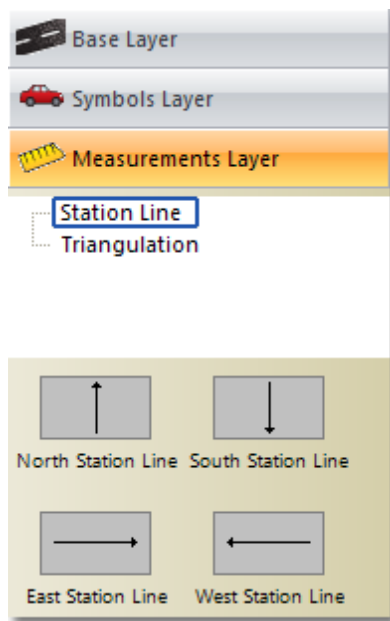
If you used the baseline/offset measurement method to located evidence at the incident scene, these tools will assist you in accurately placing evidence symbols on your diagram.

Using station lines

To begin using a station line object

1. Click the Measurements layer tab.
2. Click the **Station Line** toolset.
3. Select one of the station line tools.
4. Hold down the left mouse button and drag the station line tool onto the drawing. If necessary, rotate, drag and stretch the station line shape, positioning it to align with the baseline you used at the scene of the incident.

Note Be sure the station line's zero point aligns with the zero point location you used at the incident scene.



Specifying evidence locations

After positioning the station line you can begin specifying the evidence locations measured from that line.

To specify evidence locations measured from a station line

1. Select the station line.
2. Click **Edit Measurements** on the station line Properties Bar.

- OR -

Right-click on the station line and click **Edit Measurements** on the shortcut menu.

ESD will open the **Station Line Measurement Points** window, where you will enter the measurement data collected at the scene.

Each measurement point has two distance components, as illustrated by the yellow lines in the graphics below:

Graphic A: The distance along the station line, measured from the zero point.

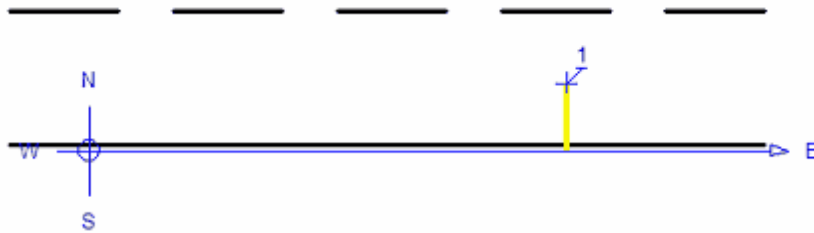
Graphic B: The distance from the station line to the evidence.

In the Measurement Points entry grid, the first distance component is called "Station", and the second is termed "Distance".

Graphic A:

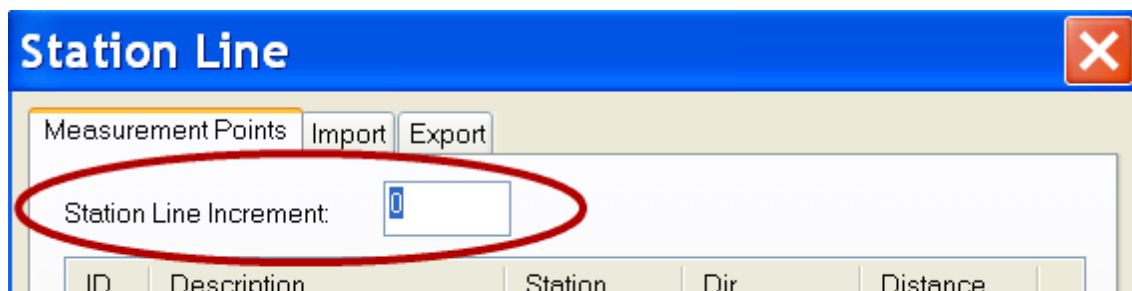


Graphic B:



Station line increment

In very large incident scenes, it may be useful to subdivide the station line into equal length segments. When this technique is used, distances along the station line are recorded using a combination of the segment number and the distance from the beginning of the segment. If you managed the station line using multiple segments, enter the segment length in the Station Line Increment box. Otherwise enter 0 (zero) in Station Line Increment.



Measurement entry grid

You will enter measurement point information on the entry grid.

Station Line ✕

Measurement Points

Station Line Increment:

ID	Description	Station	Dir	Distance
1	skid 1 start	3	Left (N)	2
2	skid 1 stop	28	Left (N)	7
3	skid 2 start	2 6	Left (N)	8
4	skid 2 stop	27	Left (N)	13
5	veh 1 rr	25 6	Left (N)	6
6	veh 1 lr	23 6	Left (N)	12 4
7	veh 1 rf	43 8	Left (N)	12 7
8	veh 1 lf	41.10	Left (N)	18 6

If you divided the station line into segments, enter the segment length (in feet).

If all measurements were taken from the zero point, enter 0.

Press Tab to advance to the measurement point entry grid.

^

v

To record items for each measurement point

Five items are recorded for each measurement point: an ID for the point, a description of the evidence located there, the distance along the station line, the left/right position of the point, and the distance from the station line to the evidence.

These five items are described below:

ID

Enter an ID number or short description for the measurement point. The value entered here will be displayed near the measurement point.

Description

In a few words, describe the evidence at this location.

Station

Enter the distance along the station line as measured from the zero point.

If you are using U.S. measurements, you can enter the distance in feet and inches by placing a space between the feet and inch values.

To place the measurement point behind the zero point, enter a negative value.

If the Station Line Increment is zero:

See examples below.

U.S. measurement examples:

- 14 is 14 feet from the zero point
- 17.5 is 17 feet 6 inches from the zero point
- 17 6 is 17 feet 6 inches from the zero point
- 12 5.5 is 12 feet 5 1/2 inches behind the zero point

Metric examples:

- 6 is 6 meters from the zero point
- 9.3 is 9.3 meters from the zero point
- 7.2 is 7.2 meters behind the zero point

If the Station Line Increment is NOT zero:

Enter the station line distance using the form N+M, where N is the station segment number (the first segment is 0, the second is 1, and so on) and M is the distance into the segment. ESD will compute the station line distance using the formula $(N \times SLI) + M$ where SLI is the Station Line Increment value.

If you are using U.S. measurements, you can enter the M distance in feet and inches by placing a space between the feet and inch values.

To place the measurement point behind the zero point, enter a negative value in Station.

U.S. measurement examples:

- 0+14 6 is 14 feet 6 inches into the first segment
- 2+4 is 4 feet into the 3rd segment

3+17 8 is 17 feet 8 inches into the 4th segment

-0+10 is 10 feet behind the zero point

Metric examples:

0+10.5 is 10.5 meters into the first segment

2+4 is 4 meters into the 3rd segment

-0+3 is 3 meters behind the zero point

Dir

When you TAB to or click on the Dir box, ESD will open a selection list containing the values "Left" and "Right".

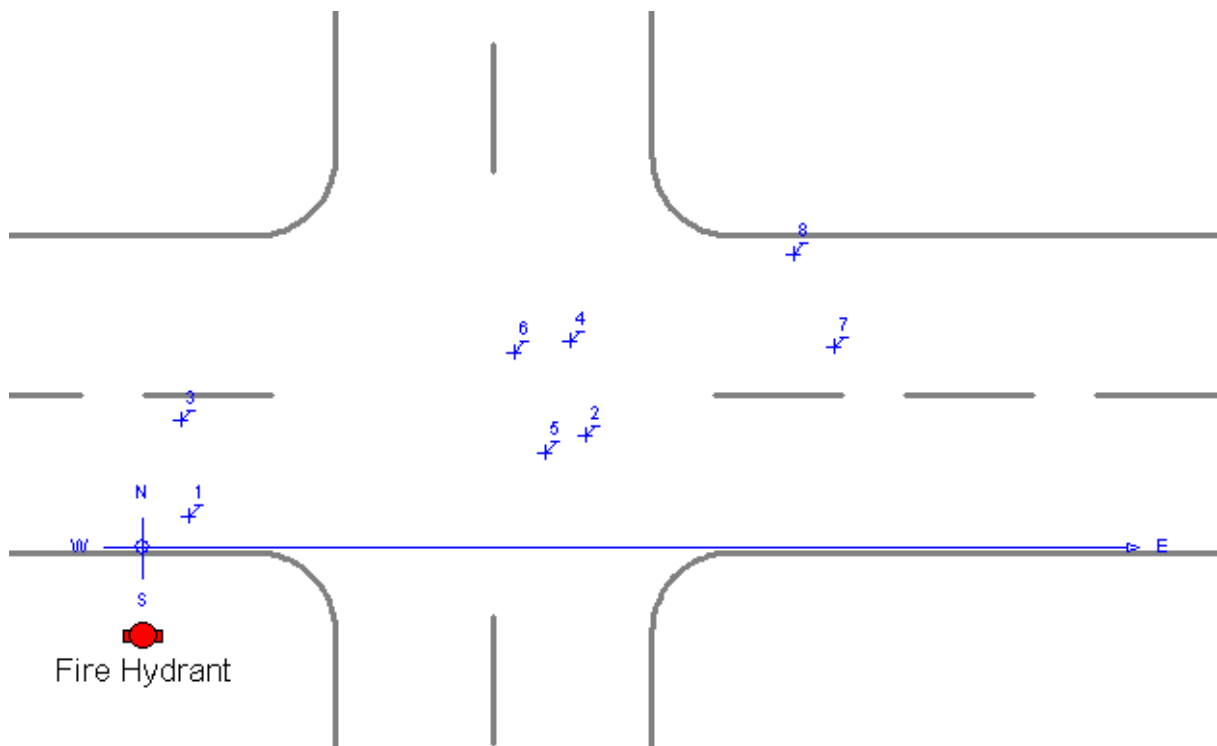
Select one of these items to indicate the measurement point's position relative to the station line. Press the up or down arrow on the keyboard -OR- click with the mouse to change the selection. Press the **TAB** key on your keyboard to close the selection box and advance to the Distance column.

Distance

Enter the distance from the station line to the measurement point.

Click **OK** to close the Measurement Points window.

ESD displays the marker points on the drawing.



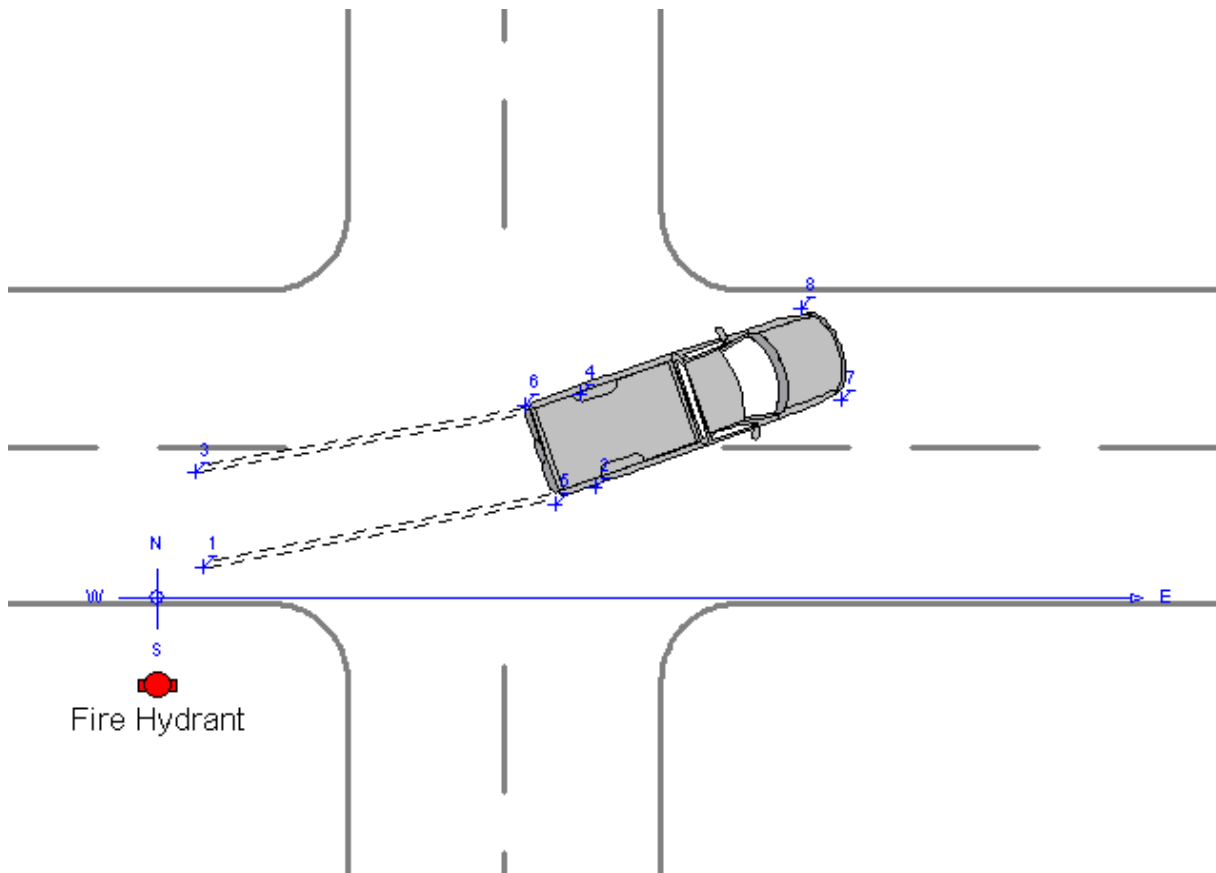
For the above example, the baseline is aligned with the curb line running from west to east, and the zero point is the point on the curb nearest to the fire hydrant. For clarity, this illustration shows the station line slightly above the curb line.

Positioning symbols using marker points

Once you complete entry of data in the Measurement Points window, you can use the marker points to position symbols on the diagram.

To position a symbol

1. Click the **Symbols** layer tab.
2. Select a symbol and drag it onto the diagram.
3. Stretch, rotate, and drag the symbols as needed to align them with the marker points.



To remove a measurement point

1. Click the **Measurements** layer tab.
2. Open the **Measurement Points** window (**Edit Measurements** button).
3. Enter 0 (zero) in the point's Station and Distance cells.
4. Click **OK**.

To copy measurement values to another program or document

1. Click the **Measurements** layer tab.
2. Open the **Measurement Points** window (**Edit Measurements** button).
3. Click the **Export** tab.
4. Use the **Copy to Clipboard** or **View as Document** command buttons in the Export window.

Note By default, station lines and measurement points are not included in printed or

exported drawings. If you wish to include them in printed or exported drawings, see Configuring user options.

See Also:

LTI Import

Station Line Export

5.4 Advanced diagram tasks

While most activities performed in ESD may be accomplished in a straight forward manner, there are times when you need more advanced knowledge of the software.

This section discusses some of the most common advanced tasks.

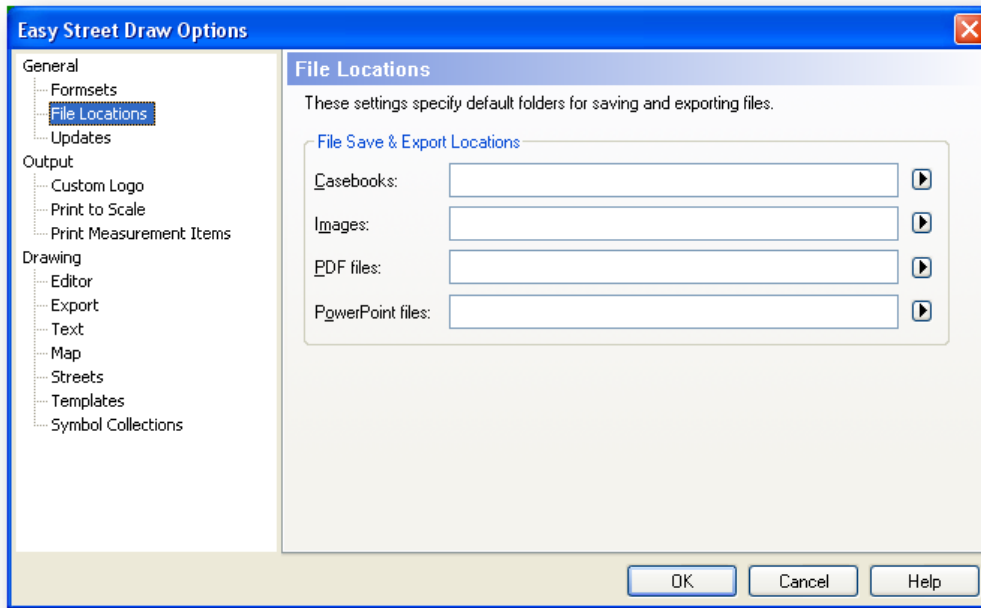
Topics include:

- Configuring user options
- Using drawing tools
- Working with templates
- Handling special situations

5.4.1 Configuring user options

Here's what you'll find in this topic ...	
File options	Output options
Drawing options	

ESD gives you the option to configure the software to your preferences - from default file locations to drawing behavior.



Easy Street Draw Options settings are organized by Files, Output, and Drawing categories

Configuring user options

You access the **ESD Options** window on the **Tools** menu. Once you have set your preferences they will remain the default settings until you change them again.

Files options

The Files option allows you to set default **File Locations**. This is where you:

Specify the default file locations where you want to save or export:

- **Casebooks**
- **Images**

For more information, see Exporting a drawing.

- **PDF files**

For more information, see Creating a PDF.

- **PowerPoint files**

For more information, see Creating a PowerPoint presentation.

Specify a default location to search for:

- **Attachments**

For more information, see Adding attachments to a casebook.

Note When you add an attachment, you have the option to navigate to the appropriate file folder (on the Add Attachments window) and select **Remember this Folder** button. This will have the same outcome as selecting the folder on the Options window.

Output options

Output options is where you specify default settings that pertain to print and/or export.

Specify the following print/export defaults:

- **Custom Logo**

This setting enables you to select a custom logo to be included in print, PDF, and PowerPoint output. Click the **Browse for Logo** button to add the logo and then check the **Use a custom logo** box.

- **Print to Scale**

The Print to Scale option allows you to specify the Print to Scale margins; you can also choose to print border lines at margins, when you **Print to Scale**.

- **Print Measurement Items**

These settings determine whether or not the Measurement items will be printed. Here you can specify if you wish to include measurement markers in printed diagrams and/or include a table of measurements in standard print output.

Drawing options

ESD drawing options allow you to specify defaults that pertain to diagrams.

Editor

These settings control features of the diagram editor window. This is where you:

Check the corresponding box to:

- Maximize ESD on startup
- Gray inactive layers
- Show curblines apex marker
- Show symbol tooltips
- Use white as the initial symbol fill color

Select the drag handle size:

From the drop-down menu you can select one of the following:

- 6 pixels
- 8 pixels
- 10 pixels

Specify the default measurement system:

Select one of the following:

- U.S Feet & Inches
- U.S. Feet & Tenths
- Metric

Export

These settings control the default size, resolution, and color method of drawings exported from ESD. You may also choose to compress exported images or select a default file format.

Text

These settings control the default height and behavior of text in the drawing. You can enter text height in feet and/or inches, centimeters or points. You may also choose to prevent the rotation of text inside vehicle symbols.

Note For best results, specify the text height in points. The value you select will be converted to world units the first time text is added

to the drawing.

Streets

These settings control the default width and behavior of street shapes. This is where you:

Specify:

- Travel lane width
- Shoulder width
- Curb return setbacks
- Inner stripe setback

Select default vehicle alignment:

ESD automatically aligns vehicles to the right when dragged onto a street.

From the drop-down menu you can select on of the following:

- **Right Side** - aligns the vehicle to the right side of the street
- **Left Side** - aligns the vehicle to the left side
- **None** - turns off the vehicle alignment feature

Templates

The Templates option allows you to enter a name and location for up to three drawing template groups. For more information, see Adding a template group.

Note File locations specified on the Options window must exist. ESD saves template collections in the folder specified; it will not create a new file folder.

See Also:

Printing a casebook

Exporting a Drawing

5.4.2 Using drawing tools

Here are the drawing tools discussed in this topic ...	
Basic shape tools	Callout tool
Connected lines tool	Closed shape tool
Crosswalk tool	Parking stall tool
Measuring tape tool	Dimension line tool
Highlighter tool	Text, streets, stripes
Here's what else you'll find ...	
Creating custom symbols	

Can't find the symbol you're looking for? Need something unusual? You can draw it yourself. But don't worry - we've made it as easy as possible!

Tip!When you select a drawing tool, look for a tip - displayed below the work area - that will tell you how to use the selected tool.

Using drawing tools

Drawing tools are available on the toolbar located directly above the work area. Objects you draw with the tools behave like pre-drawn symbols - they can be grouped, copied, moved, rotated, and modified.

To draw basic shapes/customized symbols


Select basic shapes.

1. Click the desired shape drawing tool - **Line, Arc, Square, Rectangle, Circle, or Ellipse**. The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the shape to start. Hold down the left mouse button as you move the mouse to stretch the shape.
3. Release the mouse button.

To draw a custom symbol, repeat steps 1-3. When all the shapes have been drawn and arranged, group the shapes.


To call attention to a particular detail

Select the Callout tool.

1. Click  (the **Callout** drawing tool). The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the callout shape to start. Hold down the left mouse button and move the mouse to stretch the shape.
3. Release the mouse button.
4. Type text. Text will be displayed in the callout box, as well as on the Properties Bar.


To draw connecting lines

Select the Connected Lines tool.

1. Click  (the **Connected Lines** drawing tool). The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the connected lines to start.
3. Hold down the left mouse button and drag the crosshair. Click at each corner point.
Repeat as needed.
4. Right-click to stop drawing.


To draw a closed shape

Select the Closed Shape tool.

1. Click  (the **Closed Shape** drawing tool). The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the closed shape to start.
3. Hold down the left mouse button and drag the crosshair. Click at each corner point.
Repeat as needed.
4. Right-click to stop drawing. The line ends will automatically connect to make a closed shape.


To draw a crosswalk

Select the Crosswalk tool.

1. Click  (the **Crosswalk** drawing tool). The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the crosswalk to start.
3. Hold down the left mouse button and drag the crosshair where you want the crosswalk to end.
4. Release the mouse button.


To draw a parking stall

Select the Parking Stall tool.

1. Click  (the **Parking Stall** drawing tool). The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the parking stalls to start.
3. Hold down the left mouse button and drag the crosshair where you want the parking stalls to end.
4. Release the mouse button.

To show scale


Select the Measuring Tape tool.

1. Click  (the **Measuring Tape** drawing tool). The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the measuring tape to start.
3. Hold down the left mouse button as you move the mouse to stretch the measuring tape. Watch the **Length** on the Properties Bar for precise measurement.
4. Release the mouse button.

Tip! By default measuring tapes are not included in printed drawings. To enable printing select the measuring tape; on the Properties Bar, check the **Include Measuring Tape in Printed Drawing** box.

To show distance between two objects


Select the Dimension Line tool.

1. Click  (the **Dimension Line** drawing tool). The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the dimension line to start.
3. Hold down the left mouse button and move the mouse to stretch the line. Watch the Length on the Properties Bar for the precise measurement.
4. Release the mouse button.





Tip! All linear objects (lines, arcs, connected lines, fences, skid marks, and so on) have a **Dimensions** check box on the Properties Bar. To display the object's dimensions on your drawing, make sure the Dimensions box is checked.

To draw a highlighted section

Select the Highlighter tool.

1. Click  (the **Highlighter** drawing tool). The cursor will change to a crosshair in the work area.
2. Position the crosshair where you want the highlighted shape to start.
3. Hold down the left mouse button and drag the crosshair. Click at each corner point.
Repeat as needed.
4. Right-click to stop drawing.

To add text, streets, stripes - or erase part of a stripe

- Click  (the **Text** drawing tool) to draw a text box.
For more information, see To add a text box.
- Click  (the **Street** drawing tool) to draw a street.
For more information, see Streets.
- Click  (the **Stripe** drawing tool) to draw a stripe.
For more information, see Stripes.
- Click  (the **Stripe Eraser** drawing tool) to erase part of a stripe.
For more information, see Stripes.

Creating custom symbols

To create a custom symbol using drawing tools

1. Draw the shapes that make up the symbol, copy as needed.
For more information, see Copying an object.
2. Drag the shapes into position.
3. Select all the shapes.
For more information, see Selecting multiple objects.
4. Group the shapes.
For more information, see Grouping and Ungrouping objects.

See Also:

Manipulating Shapes, Symbols, and Text

Drawing Toolbar

5.4.3 Working with templates

ESD provides you the ability to create your own drawing templates and custom template groups. This section shows you how!

Topics include:

- Creating a drawing template
- Adding a template group

5.4.3.1 Creating a drawing template

If you find yourself frequently drawing a street layout, structure design, or other diagram layout, and none of the supplied templates provide a good starting point, you can create your own template.

Creating a new drawing template**To create a drawing template**

1. Create and customize the drawing in the normal fashion.

Note As a standard, you do not want to include symbols on your drawing template. However, there are exceptions to the rule. You may, for instance, find yourself drawing the same stretch of area consistently. In that case, you may want to

include any stable features, such as stop signs or railroad tracks.

Once your drawing is complete:

2. Click the Template button at the top left of the drawing toolbar. ESD will ask for the following information:

Template Group

ESD organizes template collections into several groups. Select the name of the group in which you wish to add your template.

Layers To Save

Select the layers to include in the template. In most cases you will include only the Streets layer because the other layers usually change from one incident to the next. However, if you have included permanent features in the Symbols layer - such as stop signs, signals or railroad tracks - you will also select the Symbols layer.

Description

The text you enter in the Description box will be displayed under the icon for your new drawing template. If you are creating a template for a specific intersection or location, your description should clearly identify the location. Example: **5th Ave and Main St.**

3. Click **OK** to save the template. The template will be included in the **New Drawing** window and you will be able to select it as the starting point for future diagrams.

Removing a new drawing template

To delete a template you previously created and saved

1. Select the template in the **New Drawing** window.
2. Click the **Delete Template** button, located in the lower left corner of the New Drawing window.

See Also:

Adding a template group

5.4.3.2 Adding a template group

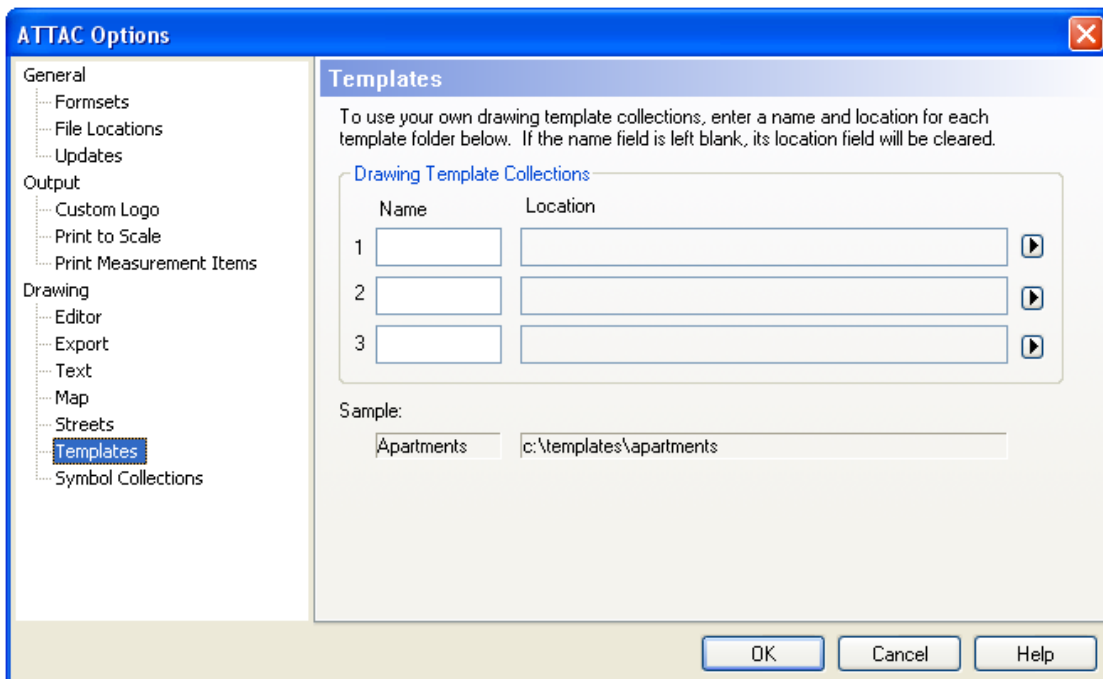
If you create a drawing template that does not fit into the existing template categories, you can add a custom template group.

To add a template group

1. Create a directory on your computer where you want to save your templates.

Tip You can create up to three custom template groups; so you will want to create a folder for each template group you plan to create.

2. On the **File** menu, click **Options**.
3. Click the **Templates** link.
4. In the **Name** box type the template group name.
5. In the **Location** box, browse for or type the location of the directory you created on your computer.
6. Click **OK**.



5.4.4 Handling special situations

This section will walk you through the steps of some of the most common diagramming tasks that require special handling.

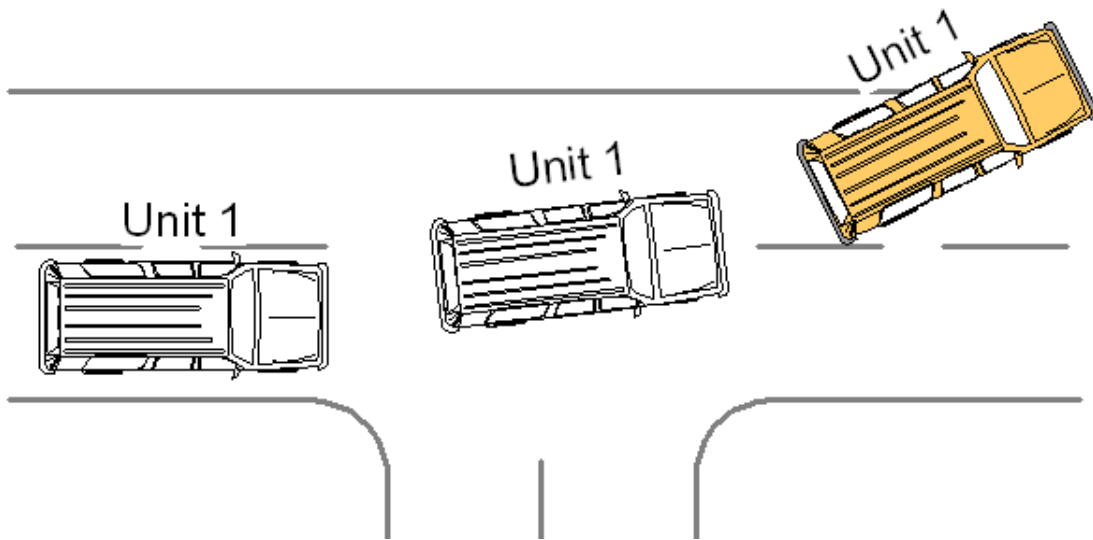
Topics include:

- Showing original vehicle position

- Showing vehicle damage
- Adding an overpass
- Drawing unusual street layouts

5.4.4.1 Showing original vehicle position

You can show a vehicle's original position before an accident by making a "ghost" of the symbol.

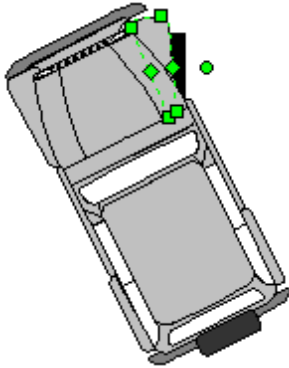


To make a ghost vehicle symbol


1. Drag a vehicle symbol onto the work area.
2. Copy the vehicle by holding down the **CTRL** key on your keyboard while dragging the vehicle.
The original will remain intact as you drag the copy.
3. Move one vehicle to the original position and move the other vehicle to the final position.
4. Right-click on the vehicle in the original position; click **Show Outline Only** on the shortcut menu.

5.4.4.2 Showing vehicle damage

Vehicle symbols are composed of basic shapes grouped together. To show damage to a vehicle, you will need to work with the symbol's individual pieces.



To show vehicle damage

1. Drag a vehicle symbol onto the work area.
2. Click  (the **Lasso Zoom** button) on the main toolbar and drag a rectangle around the vehicle symbol. When you release the mouse button, ESD zooms in on the vehicle.
3. Right-click on the vehicle and click **Ungroup**. ESD breaks the symbol into its component parts.
4. Click in an empty area to unselect the components and then click on the part of the vehicle where the damage occurred.
5. Using the shape's handles, modify the shape to show the damaged area.

Tip! Most vehicle symbols are composed of several closed shapes. If you need additional handles in a closed shape, select the shape. Near the location where you need the additional handle, right-click on a Diamond Handle and click **Split Segment**.

ESD will replace the Diamond Handle with a Square Handle with new Diamond handles on either side.

Repeat this process as needed to add handles to a closed shape.

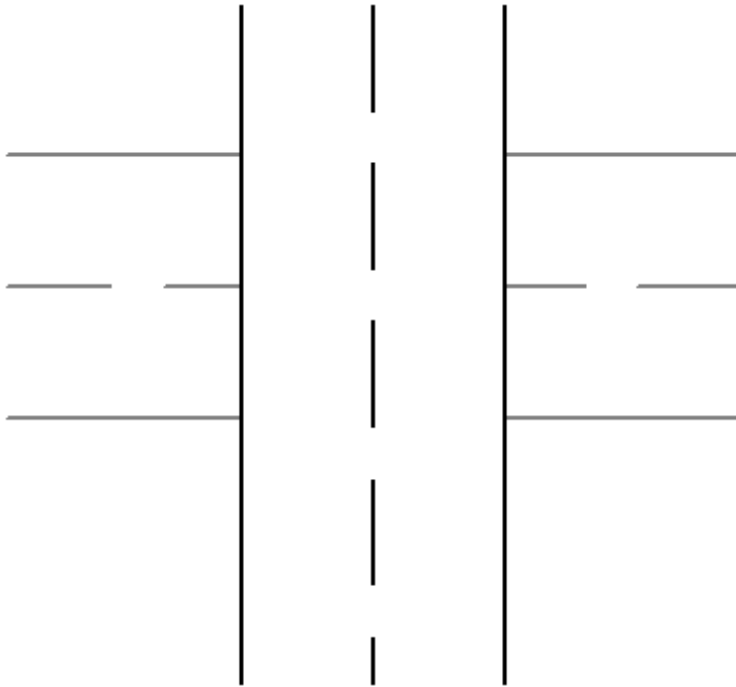
6. When you have finished modifying the symbol, drag a selection box around the shapes to select them.
7. Right-click in an empty area - Do NOT click on the symbol or you will lose your multiple selection - and click **Group**.

To restore your view of the drawing


- Click  (the **Zoom to Fit** button) on the main toolbar.

5.4.4.3 Adding an overpass

On the Base Layer, when you position two streets so they touch, ESD automatically merges the streets together. In most situations, this provides the desired result. In the case of the overpass, however, the overpass street should appear above the other street(s) in the drawing.



To draw an overpass street

1. On the Base Layer, draw the ground-level street(s).
2. Click the **Symbols** layer link.
3. Click  (the **Street** drawing tool). The pointer changes to a small street outline next to a crosshair.
4. Position the crosshair where you want the street to start. Hold down the left mouse button and drag to where you want the street to end.
5. Release the mouse button.

5.4.4.4 Drawing unusual street layouts

You can draw most street and intersection layouts using ESD's street shapes. However, you may encounter intersections or streets with unusual or irregular configurations.

Tips for handling unusual street layouts

- Use the built-in street shapes to create a street or intersection layout that is as similar as possible to the accident location. ESD provides the tools for complete customization - including curving a street, adding a turn bay, adding a lane or divider, setting the width of an individual lane, adjusting a curb return, and more.

For step-by-step instructions, see Streets.

- Hide any unwanted stripes.

See Stripes for instructions.

- Hide a curb return by selecting the curb return and then changing the color to **Transparent** on the Properties Bar.

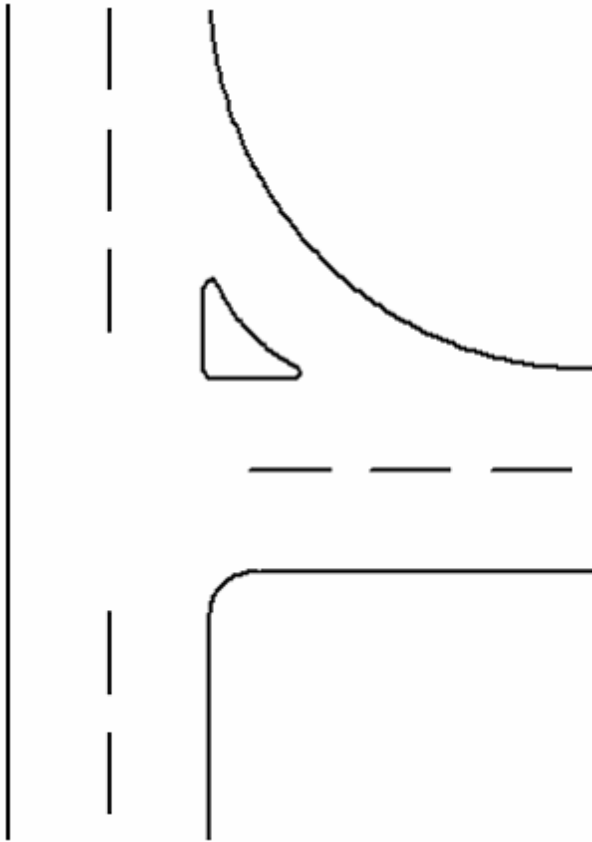
- Add independent stripes or street borders using the **Stripe** drawing tool. Any stripe you add to the drawing can have a straight, curved, multi-curved, or offset profile. To create some street borders it may be necessary to place several stripe shapes end-to-end.

See Stripes for more information.



- Draw islands and other shapes using the **Closed Shape** drawing tool.

See Using drawing tools.

Example: unusual street layout



To create the unusual street layout example

1. Start with a basic **Tee Intersection**; click the vertical street and lengthened upward.
2. Use the **Hidden** pattern painter (from the **Stripes** toolset) and erase the vertical street's upper-right border stripe.
3. Again, use the **Hidden** pattern painter and erase the horizontal street's upper border stripe.
4. Hide the curb return by changing its color to **Transparent**.
5. Use  (the **Stripes** drawing tool) to add the curved border stripe.
6. Use  (the **Closed Shape** drawing tool) to add the island.

5.5 Lessons

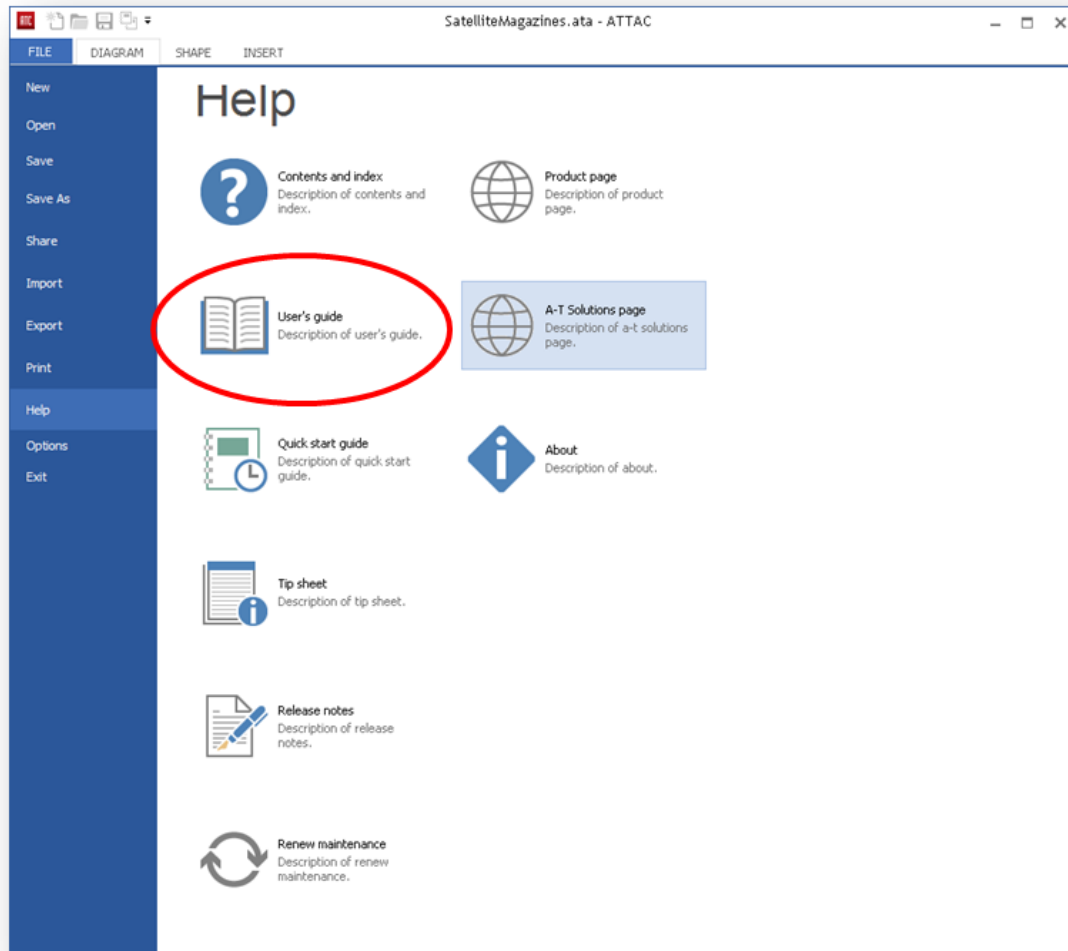
Looking for a quick way to learn the diagramming features available in ESD? Check out Chapter 6 of the ESD user manual. That's where you'll find several lessons - each designed to teach you the basic skills needed to draw most incident scenes.

Accessing the Easy Street Draw user manual

You can access the user manual on the ESD Help menu.

To access the ATTAC user manual

1. Open an ESD casebook.
2. Click on the **File** menu.
3. Click on **Help**.
4. Click on **User's Guide**.



Note

The user manual was produced in Adobe PDF; you must have Adobe Reader installed on your computer in order to view this document.

To download Adobe Reader, visit www.adobe.com.

Part



6 Output: print, PDF, PowerPoint, export

With ESD's wide variety of print and export options, sharing information in real-time has never been easier!

This section provides an overview of the output options.

Topics include:

- Printing a casebook
- Printing a diagram to scale
- Creating a PDF
- Creating a PowerPoint presentation
- Exporting a drawing

6.1 Printing a casebook

ESD provides you the option to print the entire casebook or select forms.

To print the entire current casebook

1. On the **File** menu, click **Print**.

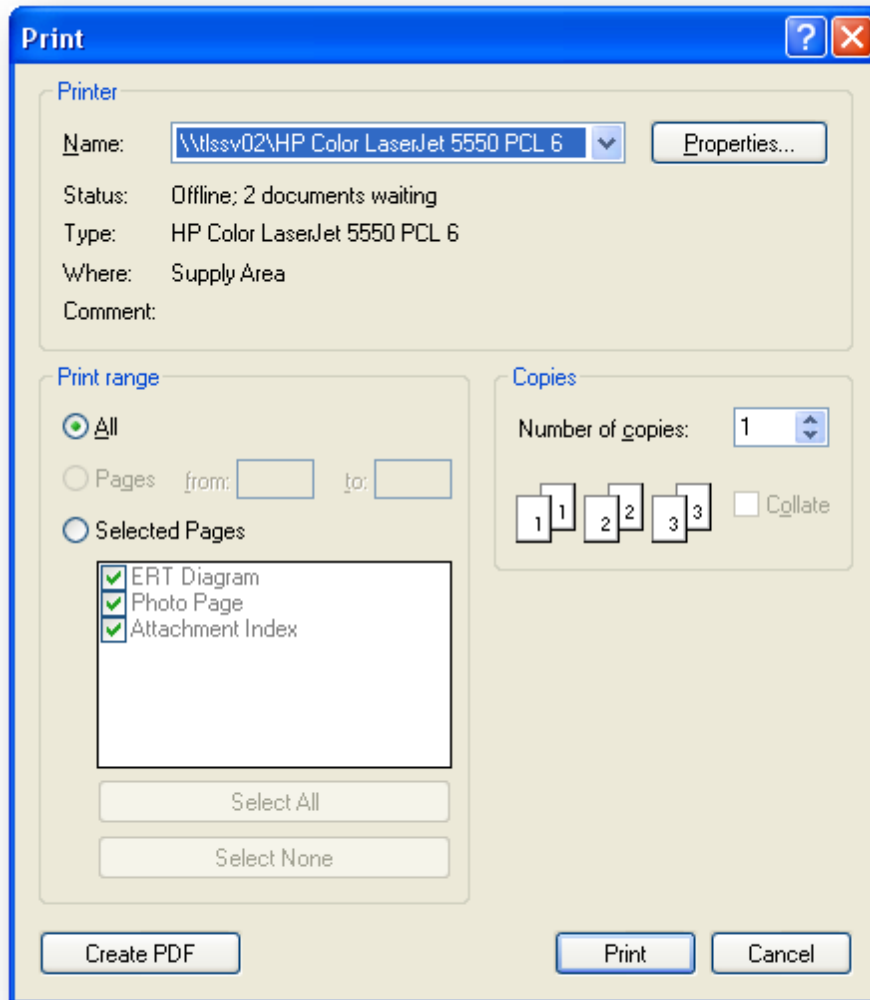
- 2.



Click (the **Print** button) to the left of the print preview window. ESD will open the Print window.

3. Select the printer.
4. Select number of copies.
5. Click the **Print** button.


EXAMPLE: ATTAC Print window



To print selected forms from the current casebook

1. On the **File** menu, click **Print**.



Click  (the **Print** button) to the left of the print preview window. ESD will open the Print window.

2. Select the printer.
3. Select number of copies.
4. Click **Selected Pages**.

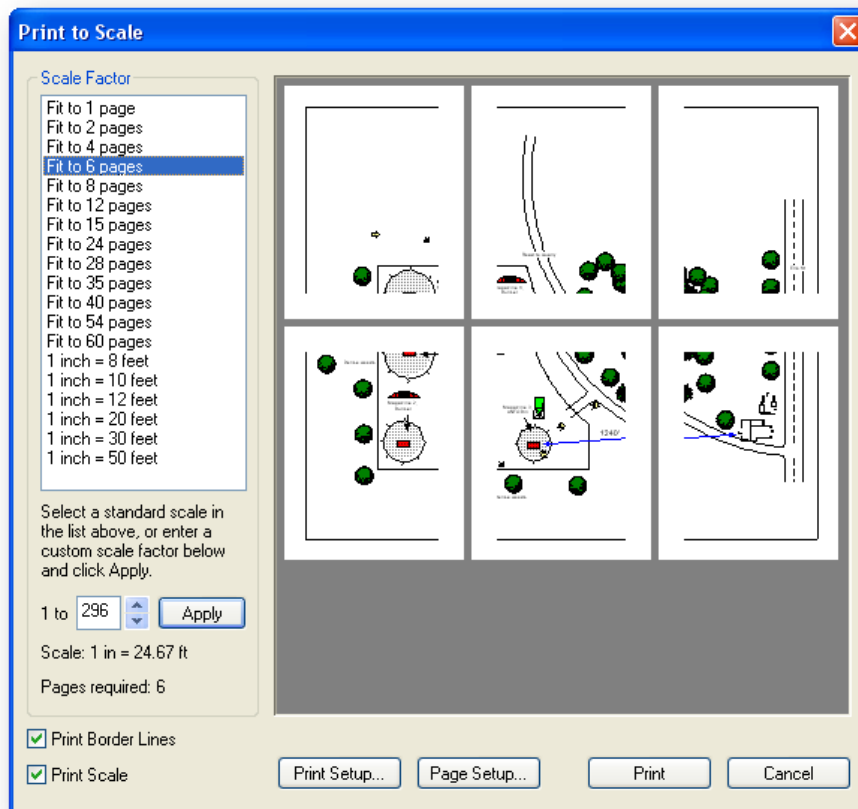
Tip! If you have a large number of forms in the current casebook, click **Select None**. This makes it easier to select only those forms you wish to print, rather than de-selecting all the ones you don't want to print.

5. Check the boxes of the pages you wish to print.
6. Click the **Print** button.

Note You can create a PDF file by selecting **Create PDF**.

6.2 Printing a diagram to scale

ESD gives you the ability to print a single diagram to scale.



Printing a diagram to scale

Before printing a diagram, make sure you are in the editor window of the diagram you wish to print to scale.

To print the current diagram at a specific scale or print across several pages

- On the **File** menu, in the Export toolset, click **Print to Scale**.

Note Print to Scale will print the current diagram only. If you have more than one diagram in your casebook, and wish to print them all to scale, you will need to print each diagram separately.

The Print to Scale window provides advanced print capabilities, including:

Options to print the drawing at a specific scale, such as 1 inch = 10 feet, or 1 cm = 2 m.

Options to tile print the drawing across multiple pages. This is useful for preparing poster-size drawings for presentation.

A border print option to enable or disable printing of a border around the perimeter of the drawing.

An option to print the scale of the drawing.

In the **Print to Scale** window, the **Scale Factor** settings provide three ways of selecting the print scale factor.

- The list at the top of the Scale Factor area begins with several "Fit to n pages" entries. When one of these items is selected ESD will scale the drawing to optimally fit within the specified number of pages.

-OR-

At the end of the Scale Factor list, you will see entries that look like "1 inch = 10 feet", or "1 cm = 3 m". Select one of these items to print the drawing at that scale. Note that ESD may tile print across multiple pages if that is necessary to print the drawing at the selected scale. Before selecting the Print button, check the Pages required value at the bottom of the Scale Factor area.

-OR-

To specify a "1 to n " print scale, enter the scale number in the box below the Scale Factor list. Click the **Apply** button to view the results in the preview window.

Print Border Lines

When the **Print Border Lines** box is checked, ESD prints a thin border around the perimeter of the drawing.

Print Scale

When the **Print Scale** box is checked, ESD places the selected scale at the lower right corner of the last page printed.

Print Setup

If you wish to send your print to scale project to a specific printer, click the **Print Setup** button. The Print Setup window will open where you can select a printer or set paper size and orientation. Click **OK** to save your changes and return to the Print to Scale window.

Note While both the **Print Setup** and **Page Setup** windows allow you to select a printer, if you are using a Windows Vista operating system, you must use the **Print Setup** window.

Page Setup

If you wish to change print margins, paper orientation, or paper size choose the **Page Setup** button. The Page Setup window will open. Make necessary changes and then click the **OK** button to return to the Print to Scale window.

Print

To complete the print operation, click the **Print** button.

6.3 Creating a PDF

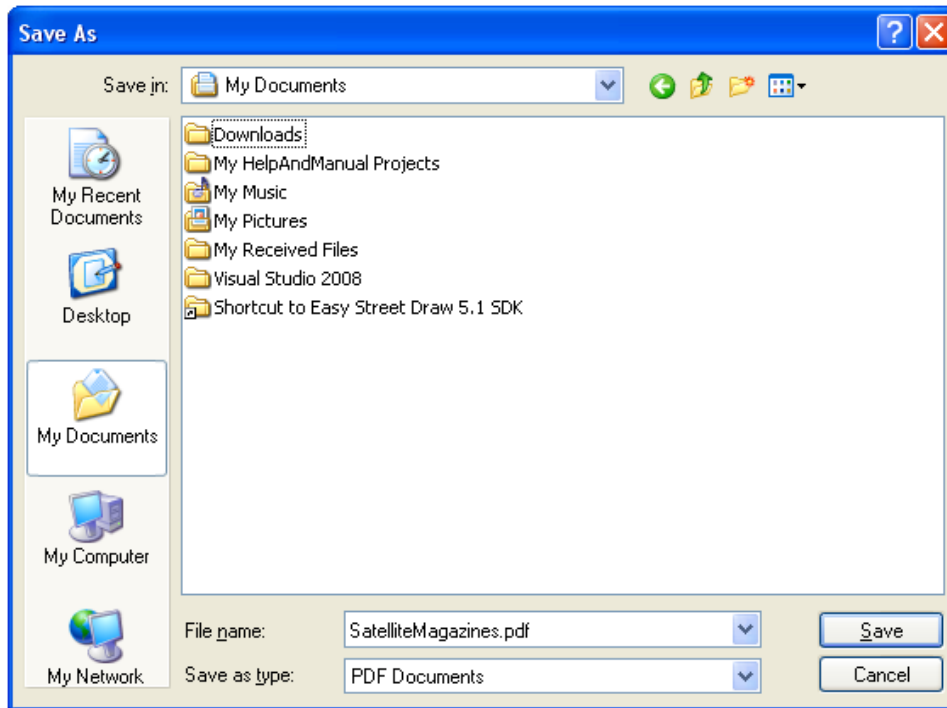
You can export any casebook to a PDF document with the click of a button.

Creating a PDF

If you wish to convert your casebook to PDF, use the appropriate command on the File menu.

To create a PDF using the current casebook

1. On the **File** menu, click Export. ESD will open the **Export** window.
2. Click the **Create Adobe PDF** link, then click the **Export** button with the Adobe PDF icon. ESD will open the **Save As** window.
3. Select folder you wish to save document in and enter a file name (file type will automatically populate), or accept the default name.
4. Click **Save**. Your PDF document will open in a separate window.



To create a PDF document containing selected pages in the casebook

1. On the **File** menu, click **Print**. ESD will open the Print window.
2. Under Print range, choose **Selected Forms**.
3. Select the pages to be included in the PDF output.

Tip! If you have a large number of forms in the current casebook, click the **Select None** button. This will make it easier to select only those forms you wish to include in your PDF document.

4. Click the **Create PDF** button. ESD will open the **Save As** window.
5. Enter a name for the PDF file and select the destination folder.
6. Click **Save** to complete the command. The PDF document will open in a separate window.

6.4 Creating a PowerPoint presentation

If you have Microsoft PowerPoint 97 or later installed on your computer, you can create PowerPoint presentations from your ESD casebooks.

Note The presentation will include diagrams and images from your casebook. Forms

and non-image attachments will NOT be included.

To create a PowerPoint presentation using the current casebook

1. On the **File** menu, click Export. ESD will open the **Export** window.
2. Click the **Create Microsoft PowerPoint** link, then click the **Export** button with the PowerPoint icon. ESD will open the **Save As** window.
3. Select folder you wish to save document in and enter a file name (file type will automatically populate), or accept the default name.
4. Click **Save**. Your PowerPoint document will open in a separate window.

6.5 Exporting a drawing

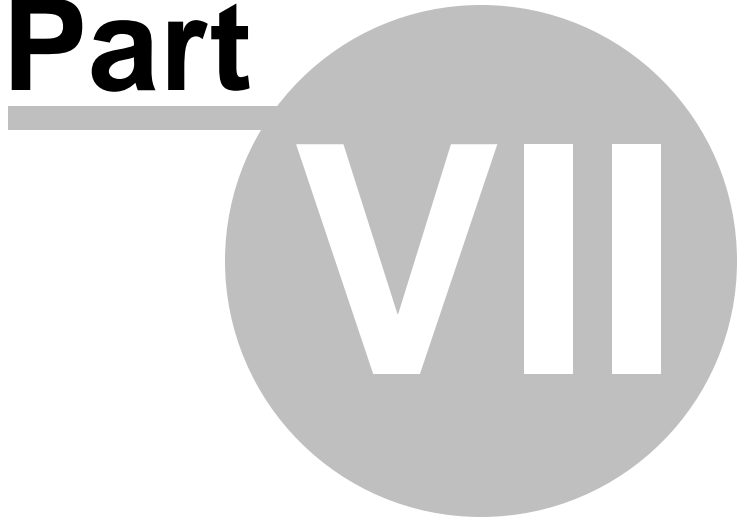
ESD provides an Export facility to save your drawing in one of several image formats.

To export a drawing

1. In the Export toolset of the Diagram toolbar, click the Image button. ESD will display the **Image Export** window.
2. Select a destination folder, enter a file name for the exported image, and choose the image type. ESD exports to the following file types: BMP, JPG, TIF, PCX, TGA, PNG, GIF, EMF, or WMF.
3. Click **Save** to complete the command.

Tip! You can set defaults for future export operations using the Export tab in the ESD Options window. To access this window, click **Options** on the **File** menu, then click on the Export link.

Part



VII

7 Quick reference

This section offers easy access to topics that may make your work in ESD all the easier.

Topics include:

- Keyboard shortcuts
- Computer conventions
- Menus and toolbars

7.1 Keyboard shortcuts

It's a good idea to be aware of keyboard shortcuts - using them can save you time!

Keyboard shortcut	Shortcut command
CTRL + drag (hold down CTRL, and then drag a selected object)	copy the selected object
CTRL + A	select all
CTRL + C	copy the selected object to the clipboard
CTRL + E	export an image
CTRL + G	group (combines selected shapes into a single grouped shape).
CTRL + Shift + G	ungroup
CTRL + L	left-justify text
CTRL + N	new drawing
CTRL + O	open an .ata file
CTRL + P	print
CTRL + S	save
CTRL + U	ungroup (breaks a shape into it's component parts)
CTRL + V	paste whatever is on the clipboard
CTRL + W	close drawing

CTRL + X	cut (deletes) the selected object and copies it to the clipboard
CTRL + Y	redo the last undo action
CTRL + Z	undo the last action
CTRL + 0 (zero)	zoom to fit
CTRL + Spacebar	zoom in
ALT + Spacebar	zoom out
CTRL + ALT + G	toggle grid
CTRL + Shift + S	save
CTRL + PAGE DOWN	send to back (positions the shape behind other shapes)
CTRL + PAGE UP	bring to front (positions the shape on top of the other shapes)
CTRL + LEFT ARROW	rotate the selected object to the left
CTRL + RIGHT ARROW	rotate the selected object to the right
CTRL + SHIFT + Z	redo the last undo action
LEFT ARROW	move the selected object to the left
Shift + LEFT ARROW	move the selected object to the left 10 pixels
RIGHT ARROW	move the selected object to the right
Shift + RIGHT ARROW	move the selected object to the right 10 pixels
UP ARROW	move the selected object up
Shift + UP ARROW	move the selected object up 10 pixels
DOWN ARROW	move the selected object down
Shift + DOWN ARROW	move the selected object down 10 pixels
DELETE	delete the selected object
TAB	if an object is selected, TAB moves the selection to the next object in the layer; if no object is selected, TAB selects the first object in the layer
F1	activate online help
F2	Flip the symbol in the front to back direction

	(vehicle symbols)
F3	Flip the symbol in the top to bottom direction (vehicle symbols)
F4	Replace the selected symbol with a variation (for example, when a top view of a sedan is selected, you can press F4 to replace it with a side view)

7.2 Computer conventions

Familiarizing yourself with the following conventions will make it easier to complete the tasks in this guide:

When you see this . . .	Do this . . .
Click	Press the left mouse button and then release
Double-click	Press the left mouse button and release twice, in rapid succession
Right-click	Press the right mouse button and then release
Drag	Press and hold down the left mouse button, move the mouse pointer to the desired location, and then release the mouse button
Point to	Move the mouse pointer to
Move the pointer	Move the mouse pointer
Select the object	Click the object to select it
Select the check box	Click the check box to select it
Clear the check box	Click the check box to cancel the selection

7.3 Menus and toolbars

ESD contains various menus and toolbars.

To Access Most Commands

You can access most commands in three ways:

- From the menu bar.

- OR -

From the toolbar.

-OR-

From the Shortcut menu (accessed by right-clicking an object in your drawing).

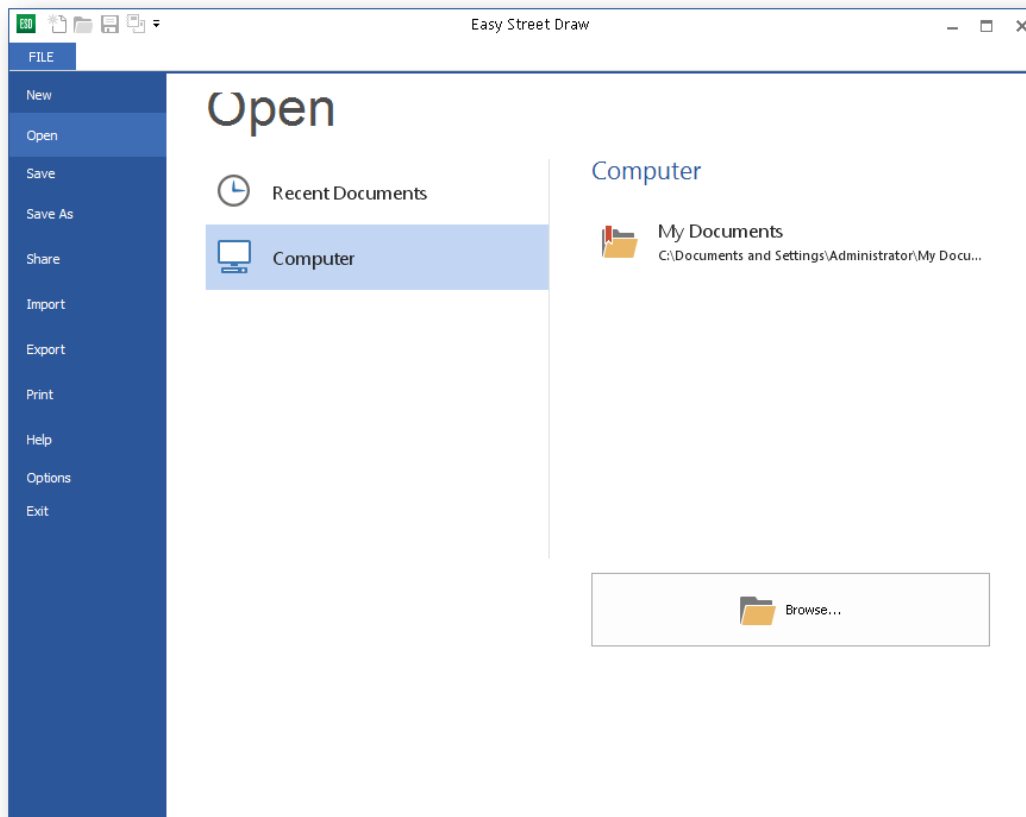
This section will provide a basic overview of the menus and toolbars available.

Topics include:

- Menu bar
- Toolbars
- Layers tabset
- Properties bar

7.3.1 Menu bar

The standard main menu bar is located near the top of the ESD window.



The **File** menu contains the following command options:

File menu commands

The File menu contains commands pertaining to the ESD file.

New	Creates a new casebook.
Open	Opens an existing casebook.
Save	Saves an opened casebook using the same file name.
Save As	Saves an opened casebook to a specified file name.
Share	Generates an email with the current .ata file as an attachment.
Import	Creates a new Casebook from a Casebook XML file.
Export	Creates an XML, Adobe PDF, or MS PowerPoint document

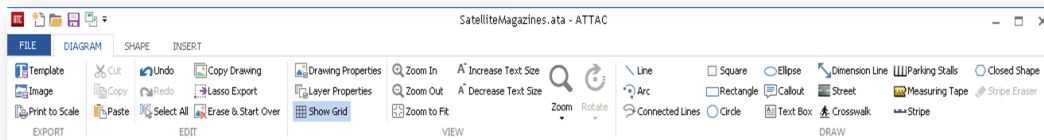
that represents the contents of the current Casebook.

Print	Prints the current casebook. Optionally, can be used to generate an Adobe PDF version of the current casebook.
Help	Provides access to various help documents (user's guide, quick start guide, tip sheet), release notes, useful Web links, and other functions.
Options	Permits configuration of default values to be used each time ESD is used.
Exit	Exits ESD.

7.3.2 Toolbars

In this topic, you'll find an overview of the following menu commands...	
Formset toolbar	Insert toolbar
Diagram toolbar	Shape toolbar

The toolbars provide quick mouse access to many commands and tools used in ESD.



Formset toolbar

The Formset toolbar contains commands that pertain to the editing of the active formset, excluding drawings or diagrams.

Cut	Removes the selected object from the formset but places a copy on the clipboard.
Copy	Duplicates the selected object and places the duplicate on the clipboard.
Paste	The object currently on the clipboard is added to the formset.
Undo	Undoes the most recently completed action.
Redo	Restores the action just Undone.
Select All	Selects all items in the current view.
Zoom In	Increases the Zoom level by a small amount.
Zoom Out	Reduces the Zoom level by a small amount.
Zoom to Fit	Adjusts the Zoom level so the document fits inside the current view.
Zoom Tools	Presents a collection of additional Zoom tools, including Zoom to Width, Zoom to 3/4 Width, and Zoom to 1/2 Width.

Insert toolbar

The Insert toolbar contains commands that pertain to the addition of images and attachments to the Casebook.

Image/DXF	Inserts an image or DXF drawing into the drawing.
Attachment	Inserts an attachment into the Casebook.

Diagram toolbar

The Diagram toolbar contains commands that pertain to creating and manipulating text and linear elements of a drawing.

Template	Creates a reusable template from the current drawing.
Image	Saves the drawing as a bitmap or other image format.
Print to Scale	Prints the drawing with the ability to scale it.
Cut	Removes the selected object from the formset but places a copy on the clipboard.
Copy	Duplicates the selected object and places the duplicate on the clipboard.
Paste	The object currently on the clipboard is added to the formset.
Undo	Undoes the most recently completed action.
Redo	Restores the action just Undone.
Select All	Selects all items in the current view.
Copy Drawing	Copies the entire drawing to the clipboard.
Lasso Export	Selects an area of the drawing to print or export.
Erase & Start Over	Erases the entire drawing and allows the selection of a new template.
Drawing Properties	Allows the user to view or modify the properties for the current drawing.
Layer Properties	Allows the user to view or modify the properties for the current layer.
Show Grid	Toggles the visibility of the drawing's grid.
Zoom In	Increases the Zoom level by a small amount.
Zoom Out	Reduces the Zoom level by a small amount.
Zoom to Fit	Adjusts the Zoom level so the document fits inside the current view.

Increase Text Size	Increases the size of the current text by a small amount.
Decrease Text Size	Reduces the size of the current text by a small amount.
Zoom Tools	Presents a collection of additional Zoom tools, including Zoom to Width and Lasso Zoom.
Rotate Tools	Presents a collection of preset rotation options for the selected object.
Line	Draws a simple straight line.
Arc	Draws an arc.
Connected Lines	Draws a series of connected straight lines.
Square	Draws a square.
Rectangle	Draws a rectangle.
Circle	Draws a circle.
Ellipse	Draws an ellipse.
Callout	Draws a text note with an arrow indicator.
Text Box	Draws a container for custom text input.
Dimension Line	Draws a line with a numeric dimension indicator.
Street	Draws a surface street.
Crosswalk	Draws a pedestrian crosswalk.
Parking Stalls	Draws one or more parking stalls.
Measuring Tape	Draws a measuring tape with numeric markers.
Stripe	Draws a traffic stripe.
Closed Shape	Draws a series of connected straight lines that form a

closed shape.

Strip Eraser Erases portions of a traffic stripe.

Shape toolbar

The Shape toolbar offers commands pertaining to the drawing and manipulation of shapes in a drawing.

Cut	Removes the selected object from the formset but places a copy on the clipboard.
Copy	Duplicates the selected object and places the duplicate on the clipboard.
Paste	The object currently on the clipboard is added to the formset.
Undo	Undoes the most recently completed action.
Redo	Restores the action just Undone.
Select All	Selects all items in the current view.
Lasso Export	Selects an area of the drawing to print or export.
Properties	Allows the user to view or modify the properties for the current shape.
Show Grid	Toggles the visibility of the drawing's grid.
Zoom In	Increases the Zoom level by a small amount.
Zoom Out	Reduces the Zoom level by a small amount.
Zoom to Fit	Adjusts the Zoom level so the document fits inside the current view.
Increase Text Size	Increases the size of the current text by a small amount.
Decrease Text Size	Reduces the size of the current text by a small amount.

Zoom Tools	Presents a collection of additional Zoom tools, including Zoom to Width and Lasso Zoom.
Rotate Tools	Presents a collection of preset rotation options for the selected object.
Align Tools	Aligns two or more selected shapes.
Flip Vertically	Flips the selected shape top-to-bottom.
Flip Horizontally	Flips the selected shape side-to-side.
Bring to Front	Places this shape in front of all other shapes.
Send to Back	Places this shape behind all other shapes.
Group	Combines the selected shapes into a group.
Ungroup	Breaks the selected shape or group of shapes into its component shapes.

See Also:

Using drawing tools

7.3.3 Layers tabset

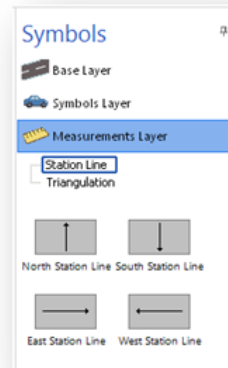
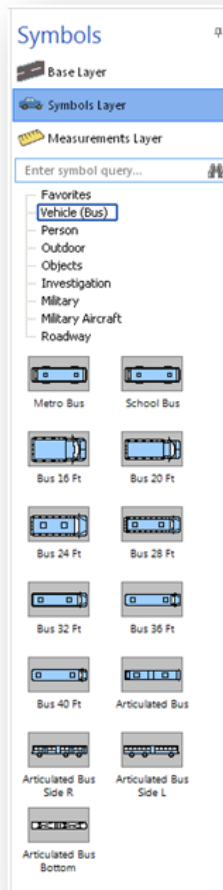
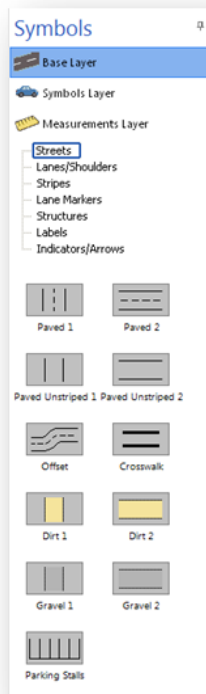
When you are working on the diagram editing window, the layers tabset will be located on the right side of the work area, in the **Symbols** panel.

Click the corresponding tab to view the layer's toolsets. Toolsets are located on the right side of the main window; click on a toolset button and the symbols available - including any subsets - are displayed in the window below. You will add most of your drawing objects by dragging them from a toolset/subset onto the work area.

Base Layer

Symbols Layer

Measurements Layer



See Also:

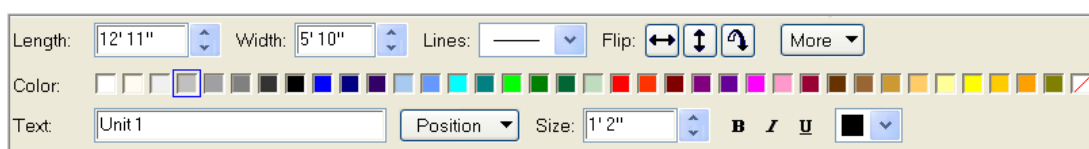
Base layer

Symbols layer

Measurements layer

7.3.4 Properties bar

The Properties Bar is located at the bottom of the main window.

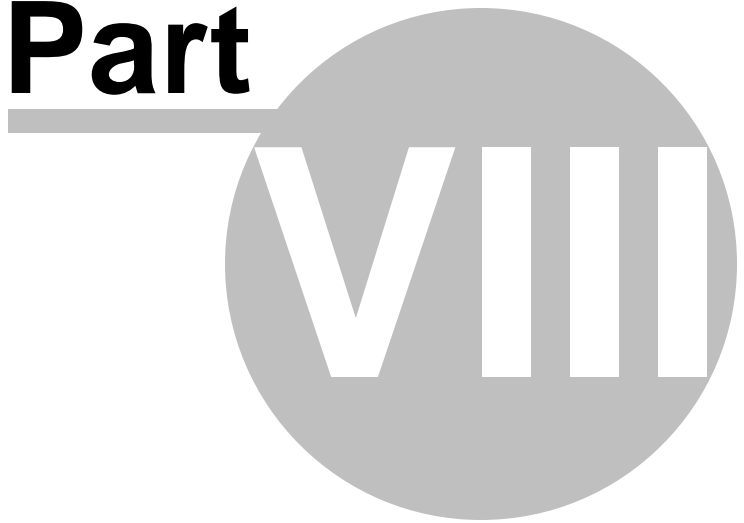


The Properties Bar acts as a smart toolbar—changing as you select different objects in the drawing.

Example:

Select a street shape and the properties of that street will be displayed - including the street's name, number of lanes, lane width, and more. You can modify this street by changing the settings displayed on the Properties Bar. Click on a vehicle, and the properties automatically change to that of the selected vehicle.

Part



8 Easy Street Draw (ESD) PRO

ESD provides technology that allows you to attach supporting documentation to a casebook. Attachments may include digital photographs, scanned images and documents, spreadsheets, word processing documents, video files, and audio files - basically any form of digital evidence.

EXAMPLE: Attachment Navigator



Topics include:

- Adding attachments to a casebook
- Placing attachments on a diagram
- Working with non-image attachments
- Entering attachment information

8.1 Entering attachment information

Image thumbnails for image attachments are displayed in the Attachments Navigator pane at the left edge of the ESD window.

Entering image information

To enter information pertaining to the image, select its icon in the Attachment

Navigator. ESD will open the attachment editor window. The image will be displayed in the lower central portion of the screen. A form entry area will appear above the image.

To enter image information

- Enter information under **Description**.

See Also:

Working with non-image attachments

8.2 Adding attachments to a casebook

ESD gives you the ability to attach photographs and other electronic evidence to your casebook.

Adding attachments to a casebook

You have the option to add one or more attachments to your current casebook.

To add a single attachment to the current casebook

1. Click the **Add Attachments** button, located on the **Insert** tab. ESD will open the Add Attachments window.
2. Navigate to the appropriate file folder.

Tips! Check the **Thumbnail View** box to preview images.

If the selected folder contains a large number of files or you are searching for one particular file type, you can narrow the search under **Show**. Simply check the box(es) for the file type(s) you wish to view.

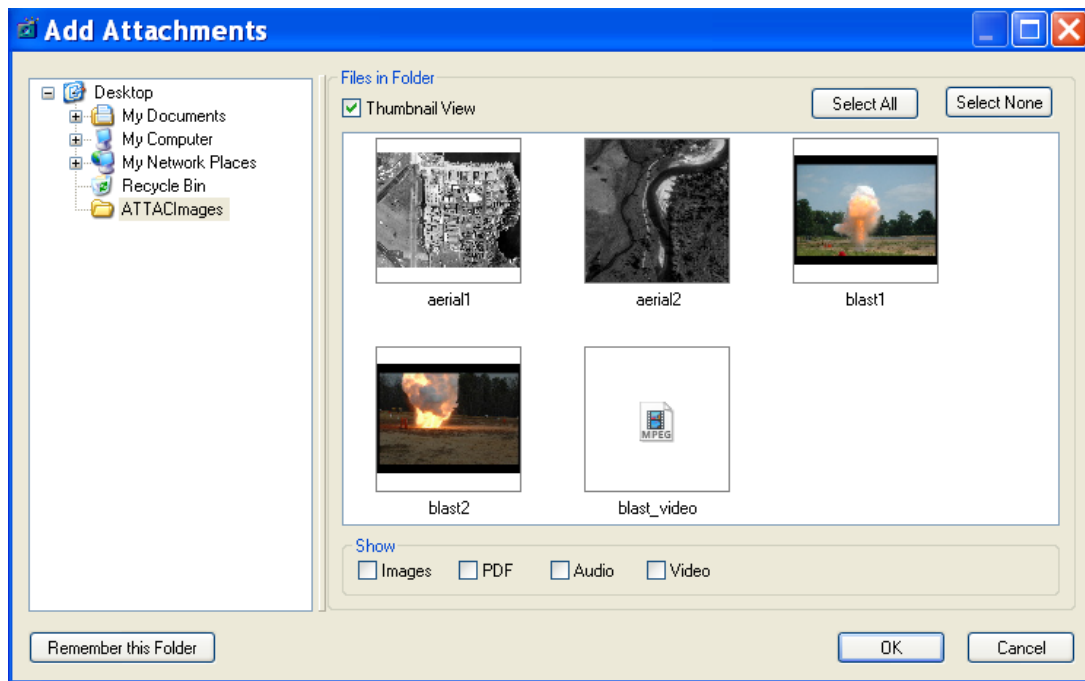
3. Double-click on the file you wish to add.

-OR-

Click the file you wish to add.

4. Click **OK**.

Example: Add Attachments window



To add multiple attachments to the current casebook

1. Click the **Add Attachments** button, located on the **Insert** tab. ESD will open the Add Attachments window.
2. Navigate to the appropriate file folder.

Tips! Check the **Thumbnail View** box to preview images.

If the selected folder contains a large number of files or you are searching for one particular file type, you can narrow the search under **Show**. Simply check the box(es) for the file type(s) you wish to view.

3. Hold down the left mouse button and drag the mouse across the thumbnail images or file names you wish to attach.

-OR-

Hold down the **CTRL** key on your keyboard and click on each thumbnail or file name.

-OR-

Click on the first thumbnail or file name in a group of files; hold down the **SHIFT** key and then click on the last item in the group.

-OR-

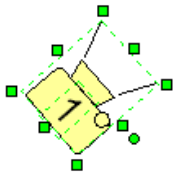
Click the **Select All** button to select all files in the selected folder.

4. Click **OK**.

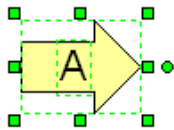
8.3 Linking attachments to a diagram

When a casebook includes one or more diagrams, you can drag and drop an attachment from the Attachments navigator onto a diagram. When this occurs, ESD will place an icon on the drawing to represent a link to the attachment.

Example: Attachment icons



A camera icon represents a link to an image attachment. Using this feature allows you to show the location and orientation of the camera at the time the photograph was taken.



An arrow icon represents a link to a non-image attachment. Using this feature allows you to pinpoint where the evidence was collected at the scene.

To place an attachment link icon on a diagram

1. Select the diagram in the Form Navigator. ESD will display the diagram editor window.
2. *If necessary, scroll the Attachments Navigator so the thumbnail for the attachment is visible.*

Click on the attachment's thumbnail image to select it. Hold down the left mouse button and drag it onto the diagram, releasing the mouse button near the location where the link icon should appear.

3. Use the green handles to size and/or rotate the icon as needed.

8.4 Working with non-image attachments

ESD's attachment facility provides the ability to attach both image and non-image files to the current casebook.

Non-image files function a bit differently than image files. While ESD provides

special capabilities for image attachments - including the ability to manipulate and annotate images - you still have the ability to include descriptive information pertaining to non-image attachments. You may also view the attachment (provided you have the appropriate software installed on your computer) and save the attachment to your computer.

Working with non-image attachments

To work with a non-image attachment, select its icon in the Attachment Navigator. ESD will open the attachment editor window.

Note For image attachments, image thumbnails are displayed in the navigator; for non-image attachments, representative icons are displayed.

To enter attachment information

- Enter information under **Description**.

To open an attachment

- Click on the **Open attachment** button, located on the Formset tab.

The attachment will open in its native program.

Note Your computer must have the appropriate software installed in order for you to open the attachment.

To save attachment

1. Click on the **Save attachment** button, located on the Formset tab. The Save As window will open.
2. Indicate the appropriate file and provide a file name.
3. Click **Save**.

8.5 Working with image attachments

When you select an image from the Attachments Navigator, image manipulation toolsets (**Diagram** and **Shape** tabs) are displayed in the toolbar at the top of the ESD window.

This section will introduce you to the image tools available.

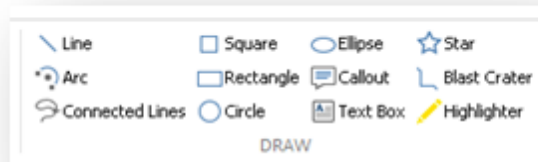
Topics include:

- Annotating an image (Annotation)
- Rotating an image (Rotation)
- Adjusting image appearance (Brightness & Contrast)
- Cropping an image (Crop)
- Saving an image (Save As)

8.5.1 Annotating an image


Here's what you'll find in this topic ...	
Callout tool	Highlighter tool
Text box tool	Basic shape tools

ESD gives you the option to annotate an image that has been added to your casebook. To view annotation options, look in the Diagram tab on the toolbar; the tools will be in the Draw group.

**Using Image Annotation Tools****Callout tool**

The Callout tool is used to draw a text callout box, allowing you to draw attention to a particular detail.

To use the callout tool

1. Click  (the **Callout** image tool). Your cursor will change to a crosshair in the work area.
2. Click near a point of interest on the image and then drag the crosshair.


3. Release the mouse button where you want to end.
4. Type a description of the point of interest. Text will appear in the callout text box, as well as on the Properties Bar.

Note Use the Properties Bar at the bottom of the editing window to edit the callout text or change the style, color, or width of the lines.

Highlighter tool

The Highlighter tool serves much the same purpose as a highlighter pen.

To use the highlighter tool

1. Click  (the **Highlighter** image tool). Your cursor will change to a crosshair in the work area.
2. Hold down the left mouse button where you wish to begin highlighting and drag the crosshair.

Tip!The Highlighter tool works like the Connected lines drawing tool.


3. Right-click when you are finished highlighting.

Note Use the Properties Bar to change the line pattern, width and color or add text.

Text box tool

The Text box tool allows you to draw a text box to add text on or near the image.

To use the text box tool

1. Click  (the **Text Box** image tool). Your cursor will change to a crosshair next to a boxed A in the work area.
2. Hold down the left mouse button and drag the crosshair to create a text box. When you release the mouse button the **Edit Text** window will appear.
3. Type the text you wish to be displayed.
4. Click **OK** to save changes.

Basic shape tools

The Draw (annotation) toolset contains several tools that allow you to include

various basic shapes to the image. Basic shape tools include: Line, Arc, Square, Rectangle, Circle, and Ellipse. Other optional toolsets may include other shape tools, such as Star or Blast Crater.

To use a basic shape tool

1. Click the shape tool you wish to use. Your cursor will change to a crosshair in the work area.
2. Hold down the left mouse button and drag the crosshair to create the shape.
3. Release the mouse button to complete the command.

Note For the Arc, use the middle handle to adjust the shape's curvature.

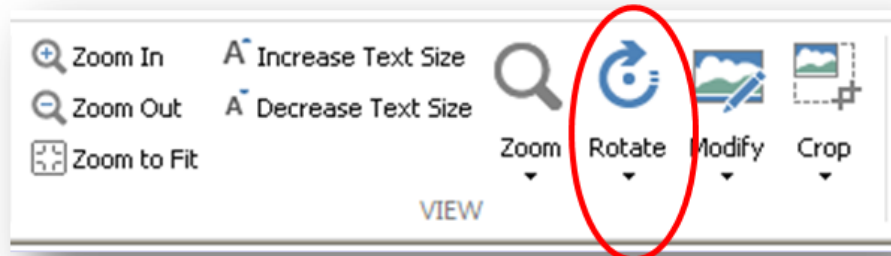
And as with all shapes, use the Properties Bar to change the shape's properties - including line pattern, width, color, and more.

8.5.2 Rotating an image

The Rotation toolset gives you the ability to rotate the selected image.

Using the image Rotation tools

You can access the image Rotation toolset once you select a shape in the Attachments navigator. The Rotation toolset is located in the **View** section of the toolbar at the top of the ESD window.



To rotate the selected shape

1. Select the **Rotation** toolset. ESD will provide seven rotation options.
2. Click the Rotate option of choice. The shape will automatically rotate accordingly.

To undo the image rotation

- Click  (the **Undo** button) on the toolbar.

Note This rotation toolset only works with *shapes*. If you wish to rotate an *image* in an attachment, select it and click on **More** in the Properties bar.

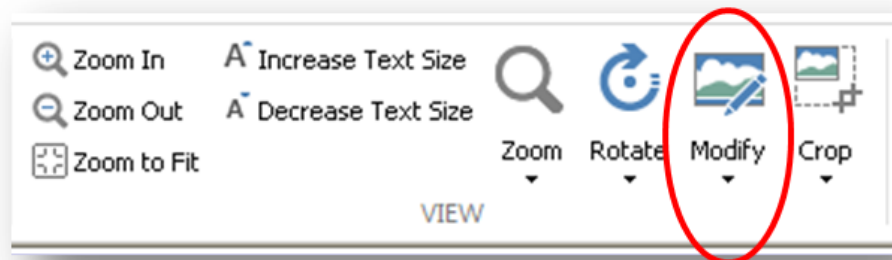
Note As always, you can also use the circle handle of the selected shape to rotate it by a freeform amount.

8.5.3 Adjusting image appearance

The Modify toolset lets you adjust the brightness, contrast and midtones of the selected image.

Using the Brightness & Contrast toolset

You can access the Modify toolset if your attachment is an image. The toolset is located in the **View** section of the toolbar at the top of the ESD window.



To adjust the brightness, contrast, or midtones of an image

1. Select the **Modify** dropdown toolset. ESD will provide three adjustment options: Brightness, Contrast and Midtones.
2. Drag the corresponding slider button left or right.

-OR-

Click the plus and minus buttons to the right and left, respectively, of the setting's value box.

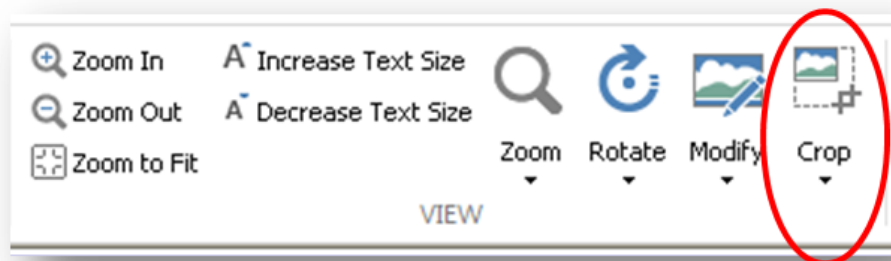
Watch the image while making adjustments to see the effect of the change(s).

8.5.4 Cropping an image

The Crop toolset allows you to crop the selected image.

Using the Crop toolset

The crop tool is used to save a section of the selected image. You can access the Crop toolset from the **View** section of the toolbar at the top of the ESD window.



To crop an image

1. Select the **Crop** toolset. ESD will provide three Crop Destinations.
2. Select the Crop Destination of choice:

New attachment

When you select this destination, ESD will create a new image attachment from the cropped area, leaving the original image intact.

-OR-


Windows clipboard

This destination option instructs ESD to copy the selected area to the Windows clipboard. The cropped image can then be pasted into another application, such as a word processing program or spreadsheet. Programs that support pasted images usually provide a Paste command on the Edit menu. If you wish to paste a cropped image into another program, see that program's documentation for additional help.

-OR-


Replace this image

If you wish to replace the selected attachment image with the cropped area, select this option. The portions of the image outside the cropped area will be discarded. This option may be useful for reducing a casebook's storage requirements when only a portion of an image attachment is needed.

3. Click  (the **Crop** image tool). Your cursor will change to a crosshair next to scissors in the work area.
4. Position the crosshair at one corner of the area you wish to crop. Hold down the left mouse button and drag the mouse across the area you wish to include in the new cropped image.
5. Release the mouse button to complete the command.

The new cropped image will be added to the navigation pane, added to the clipboard, or will replace the current image, as indicated by the Crop Destination.

Note

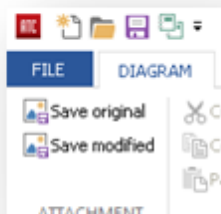
If you selected the Replace option and wish to undo the crop activity, click  (the **Undo** button).

8.5.5 Saving an image

ESD provides a couple of ways to save an image that has been added to the casebook.

Using the Save As toolset


You may access the Save As toolset in the Attachment tab once you select an image in the Attachment Navigator. The Save As tools are used to save the image to your computer's hard drive or other media.



There are two save options within the image Save As toolset: save as original image or save as a modified image.

To save as original image


When you select this option, ESD will save the image in its original form. Annotations, image rotation and adjustments to brightness and contrast will not be included in the saved image.

1. Click  (the **Save original** button).
2. Browse to the destination folder and type a File name, or keep the auto-generated File name which is a date/time stamp based on your computer's clock.
4. Click **Save** to complete the save process.

Note If the image has been cropped, the saved image will also be cropped.

To save as Edited Image

This save option instructs ESD to save the image with all changes applied. The saved image will reflect annotations, rotation, and brightness and contrast changes made to the image.

1. Click  (the **Save modified** button).
3. Browse to the destination folder and type a File name, or keep the auto-generated File name which is a date/time stamp based on your computer's clock.
4. Click **Save** to complete the save process.

Index

- A -

add attachment 144
add form 27
add image 144
add photograph 144
attachment 144

- C -

casebook 19, 20, 29
cases on file 20
create template 110

- D -

data validation 26
delete form 29
diagram 23
diagram editor 36
drawing 23

- F -

field measurements layer 93
form 19, 27
form navigation 31, 33
form order 28
form scrolling 31
forms 26
 delete 29
 reorder 28

- I -

image 144

- L -

layer 93
LTI 93

- M -

main 17
measurement 93
Microsoft PowerPoint 126

- O -

open casebook 20
Overview 7

- P -

PDF 121, 125
photograph 144
PowerPoint 126
preview 121
print 121

- Q -

QA 26

- R -

reorder 28

- S -

sequence 28
station line 93

- T -

tab 31
template 110

- V -

validation 26

- W -

window 17

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