⚡Simplex

TrueSite™ Workstation, Guidelines for:
Order Writing and
Graphic Screen AutoCAD Submittals

Overview

These guidelines describe the AutoCAD drawing compatibility and order entry requirements for True Site Workstation (TSW) graphic screens. Following these guidelines is required to provide the Applications Engineering Department with the information necessary to properly complete the customer order.

Note: This publication **does not include** Easel based: Color Graphic+ systems (2190 or 4190), Information Management Systems (IMS), or Graphic Command Centers (GCC).

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Screen Ordering Checklist

It is possible to book an order for TSW screens without specifications. However, **no order will be processed** until all of the following information is received by Applications Engineering. The five items below are each described in detail within this publication.

1. A **full** Network backup from the field.

2. One AutoCAD (DWG) file for each TSW screen ordered.

3. One hard copy drawing for each TSW screen ordered.

4. One hard copy symbol legend drawing showing the icons used on the TSW screens.

5. A system operation sheet is necessary if the operation is other than default or special control functions are required.

Network File Backup

Existing Systems Files

When submitting an order to headquarters, please include a full network backup. The latest field changes are needed to link point information to the TSW node(s).

Note: **Two network files cannot be merged.** Any necessary changes must be made at Headquarters when the screens are programmed. If changes are made in the field, they must be forwarded to headquarters. If not, the field will be required to make the changes again, after the headquarters screen and network download is done.

Numbers for New Systems at Headquarters

If the order is for a new network which is currently being processed at headquarters, please specify the order number which contains the 4190-8122 TSW screen addition. The order number of the 4190-8800 Network must also be submitted.

AutoCAD DWG Files

AutoCAD DWG File Details

It is strongly recommended that all AutoCAD files for TSW screens go through the Westminster Engineering Center of Excellence (ECOE). This will ensure that Application Engineering gets the drawings in the correct format and has usable files with the first pass.

IMPORTANT:
- In all cases, AutoCAD drawings must be created and submitted in accordance with the specifications and instructions in this document for compatibility with TSW.
- Be advised that Applications Engineering does not have the capability to create or modify AutoCAD drawings. If submitted AutoCAD drawings are not compatible with the TSW, Applications Engineering will not be able to be process the customer order until compatible drawings are resubmitted.
- District offices that do not have proficiency with the AutoCAD requirements contained in this document are strongly encouraged to use the Westminster ECOE group for creating AutoCAD drawings compatible for importing into TSW.
- District offices that do not have access to the Basic version of AutoCAD 2000/2002 (i.e. without AutoCAD extender packages such as architectural or mechanical desktop) must contact the Westminster ECOE group.

Compatible AutoCAD Format

All TSW screens for new systems must be submitted in **AutoCAD 2000/2002 DWG** format. The DWG files must be broken down into one graphic screen per building floor (exception: site plans where buildings are touch sensitive travel keys to a respective building). These graphics screens will be broken down into optimal, similarly sized coverage zones by Application Engineering based on the density, quantity, and size of the screen and its active icons.

AutoCAD DWG Files, *Continued*

Compatible AutoCAD Format
(Continued)

Note: When using later versions of AutoCAD (e.g. AutoCAD 2007) AutoCAD files must be saved using the Basic version of AutoCAD 2000/2002 (i.e. without AutoCAD extender packages such as architectural or mechanical desktop) in order to remove all proxies (see section on Proxy Entities Removal)

The screen title will appear in TSW Runtime and will be the forty character description from the TSW editor. The title will be displayed above the screen drawing area and will be visible while viewing all coverage zones and at any zoom level on that screen.

Maximum AutoCAD Drawing Entities

The maximum allowed entities for TSW are 32,700 entities per AutoCAD drawing. The quantity of entities on each AutoCAD drawing being imported into TSW must be verified.

Application Notes:

1. The TSW Configurator will ABORT the import process of AutoCAD drawings with greater than 32,700 entities.

2. Reducing the number of entities on imported AutoCAD drawings by grouping as a single entity per layer WILL increase Pan & Zoom performance.

3. In cases where 32,700 or more entities exist, the count can be reduced by:

   - Deleting extraneous details in drawings (e.g., door swings, extensive window details, restroom fixtures, any symbols not relevant to fire alarm, etc.

   - Logically grouping multiple entities into single entities on separate logical layers (e.g., text layer, wall layer, etc.) that can be turned on or off if desired.

4. Single entities MUST be edited in AutoCAD. The TSW Configurator does NOT support editing of single entities.

Additional TSW Configurator Notes:

1. The TSW Configurator can draw over an existing single entity layer; however, the TSW Configurator cannot edit or modify a single entity layer itself with the exception of being able to turn the layer completely on or off if desired.

2. The TSW Configurator is capable of Exporting the TSW graphic in DWG format for more extensive editing in AutoCAD 2000/2002.

Editable AutoCAD Entities

The following AutoCAD entities are editable in the TSW Configurator:
LINE
POLYLINE
CIRCLE
ELLIPSE
ARC
SOLID
LWPLINE
TEXT
MTEXT - if not rotated
INSERT - if all entities in the block are supported

Partially Editable AutoCAD Entities

If one or more entities inside an INSERT are unsupported, the INSERT will be imported as a "Partially-Editable/View Only" object to the TSW Configurator. Partially-Editable/View Only objects can only be selected and deleted, they cannot not be copied or pasted.

Non-Editable AutoCAD Entities

The following are AutoCAD Entities Not Editable in the TSW Configurator:

1. All other entities (except proxy entities) not listed above will be imported as "Non-Editable/View Only" objects (i.e.; cannot be cut, paste, copied or deleted).

2. "Non-Editable/View Only" entities should be located on separate logical layers (e.g., text layer, wall layer, etc.) that can be turned on or off if desired

Xrefs, Attribute Blocks, and Hatches

Xrefs (external references) are to be inserted into the drawing and burst.

Attribute blocks are to be burst with correct entity.

Hatches – solid hatches must be converted to line hatches at high density to simulate a solid hatch.

Proxy Entities Removal

All Proxy Entities MUST be removed using a **Basic version of AutoCAD 2000/2002** (i.e. without AutoCAD extender packages such as architectural or mechanical desktop) to ensure compatibility with the 4190 TSW Graphics Import Utility. To properly remove proxy entities:

1. Open the AutoCAD drawing using a 2000/2002 Basic version of AutoCAD.

2. Select all entities and copy to clipboard.

3. Create a new drawing and paste to original coordinates.

4. Save the new drawing.

5. The new drawing now has proxy entities removed for import to TSW.

AutoCAD Settings

Observe the following AutoCAD settings:

1. **Units** must be set to decimal with zero places to the right of the decimal.

2. **Limits** must be set to 0,0 by 1280, 850 for TSW screens.

3. **LT scale** to be appropriate to drawing scale.

4. **Note**: The smallest icon size is 0.2 inches. This will depend on the zoom level of the status icon, travel key, or control key

5. Scr**een Resolution:** The default TSW screen resolution is 1280 x 1024.

Optional Initial Graphic Screen Bitmap

It is optional to provide a bitmap file (.BMP) for the customer logo. The customer logo bitmap file can be used as the initial screen. However, bitmap files are not to be used as background graphical screens.

Hard Copy Drawings

Requirements

One hard copy drawing must be submitted for each TSW screen ordered. Hard copies must show the screen's walls (background and text) as well as the status icons with the appropriate addresses next to each status icon. In addition, write the screen DWG file name on the hard copy drawing.

Note: Hard copy drawings must be large enough to show details. Please select print size accordingly.

Symbol Legend

Requirements

Each order must have a symbol legend attached indicating the symbols used on that order. This file is available in AutoCAD DWG file format and **TSWLEGEND.DWG** on the Sales Engineering FTP site, under the "AutoCAD Drawings" sub directory.

Note: TSW Graphics editor issues are addressed in the *TrueSite Workstation Configurator*, document 579-844.

Default Conventions and Operations

Operations

By default, Global acknowledge will be used for the entire network. When an alarm is received by the TSW, a status indicator box at the top of the screen flashes indicating the type of alarm (Fire, Priority 2 , Supervisory, or Trouble).

Touching the status box takes the operator directly to the coverage zone acknowledge window by touching the icon in alarm, or by touching the status box again.

If the point in alarm is not linked to an icon on any screen, then the operator is automatically brought to the list menu for that type of alarm where the point can be acknowledged.

Default Conventions and Operations, *Continued*

Logical Layers

It is recommended that AutoCAD drawings for import into TSW be created with logical layers which can be controlled (turned on and off) if desired.

Examples:

Layer 0 Border Title and basic information
Layer 1 Background
Layer 2 Device
Layer 3 Address
Layer 4 Room_Name
Layer 5 Travel_Keys
Layer 6 Cover_Zones
Etc.

Colors and Text Font

The following Colors and Text Font are recommended to provide an optimum and comfortable viewing experience with crisp, sharp, text and images

Recommended AutoCAD Colors:

0 = color 7 (white/black)
BACKGROUND = color 9 (grey)
ADDRESS = color 2 (yellow)
DEVICE = color 3 (green)
ROOM_NAME = color 4 (cyan)
MISC LAYER (Smoke zones, internal boundaries, etc.) = color 1 (red)

Recommended AutoCAD Text Font:

ARIAL BOLD

Sample Screens

Drawing Border

Each drawing should include a border sized to 1280 x 850 that encompasses the entire viewable screen area for the floor.

Border Example
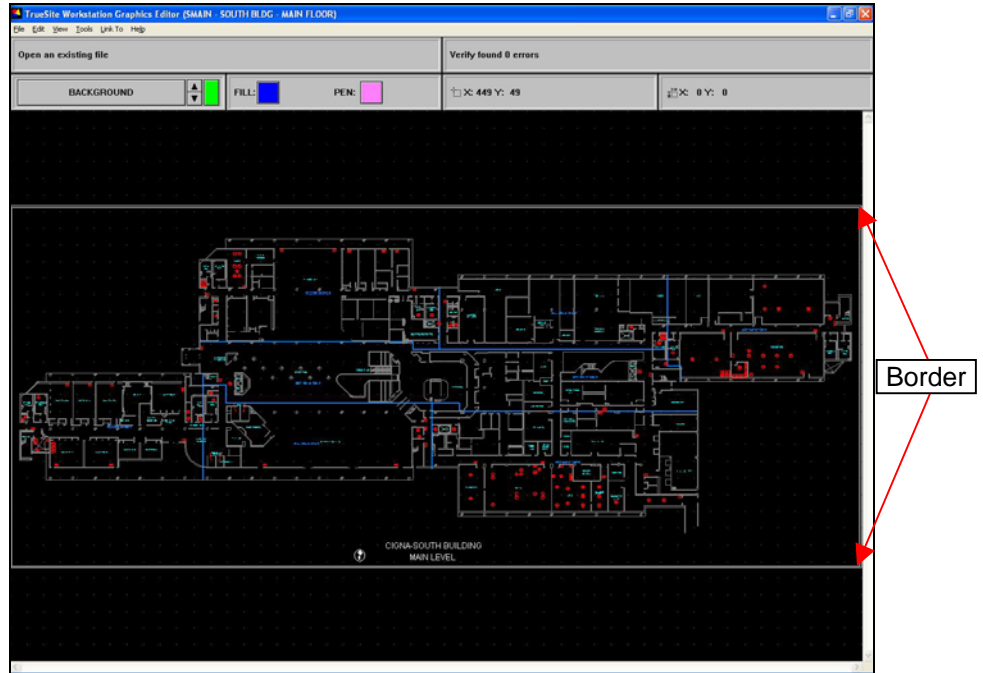
Legend Drawing (with detail enlarged)

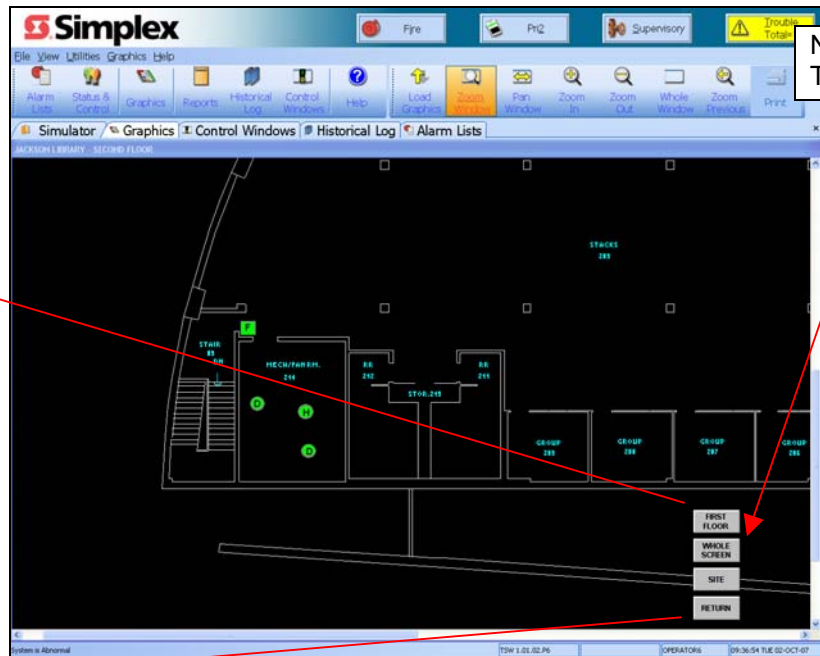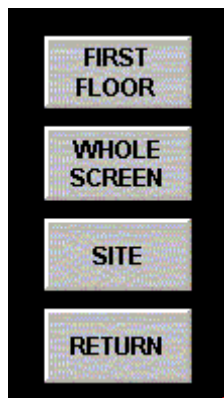# Sample Screens, *Continued*

Pan and Zoom Example

Below is an example of how navigation within a single floor plan can be accomplished using the pan and zoom feature. Navigation to other floors, buildings or a sire plan utilize dedicated Travel keys.

Normal View
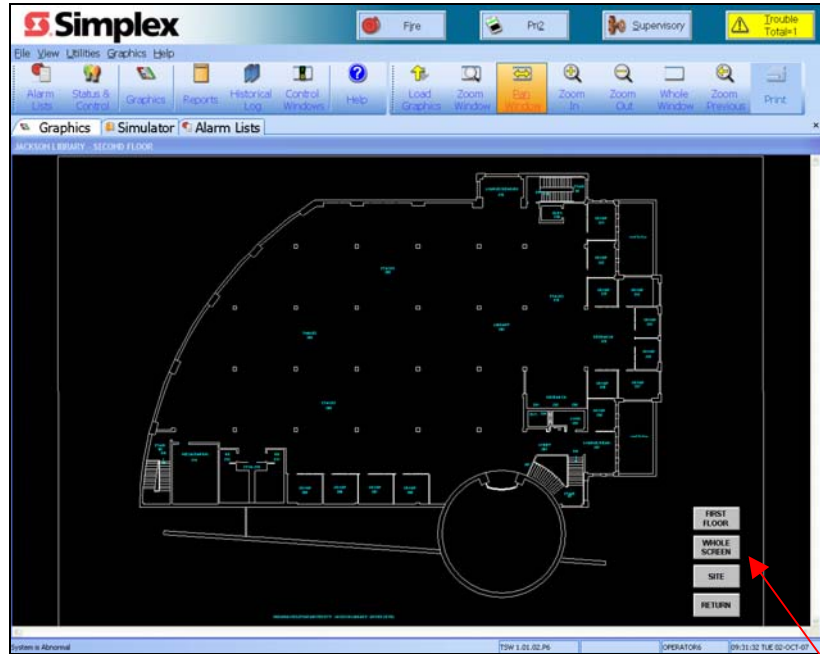
Zoomed-in View
(with non-zoomable/fixed size travel key detail enlarged)

Non-Zoomable Travel keys