# Converting CAD Maps to ArcMap Format.

NOTE: Once a cad file has been converted to ArcMap it should be archived and removed from Parcelp.

Notes: To load annotation from CAD to feature classes in SDE, you must make sure that your connection properties Dialog is set to point to your version:

Spatial Database	Connection Properties	
Server:	Sczas16	
Service:	5151	
Database:	GISSection	
	(If supported by your DBMS)	
-Account		
User Name:	isd400_Edit	
Password:	XXXXXX	
	Save Name/Password Test Connection	
└──── ┌─ Version ─────		
🔽 Save Versio	d	
ASR158_EDIT.	Davesedit Change	Click the <u>Change</u> Button and set the
	OK Cancel	connection version to your version.



•

to Load the CAD file you will be working on into ArcMap. (S:\PARCELP\...)

\* Add only the **annotation** and **polyline** sub-types of the CAD file.

Add Data		×
Look in:	🖸 04111.dwg 💽 🕒 😒 🍽 📖 🏭 🔛	
Annotatio Point Polygon Polyline		
Name:	Annotation; Polyline Add	
Show of type	Datasets and Layers (*.lyr)	1

# 2. Right click on the CAD Annotation layer in Table of Contents (TOC)

- Select the PROPERTIES item from the menu.
- Select the Drawing layers tab

Select the Following Layers and click OK:

L	ayer Properties	? ×
	General Source Fields Drawing Layers Transformations Fonts	
	Set the Visible and Invisible Drawing Layers :	
ASSR-PG ASSR ASSR-STTEXT	0       _ASSR-DIM         PB       _NORTHARROW         RD       SMTEXT         EASE-RD       @ASSR-CPYRT         LL       _CA         EASE-UTIL       @CA         @ASSR       @ASSR         @ASSR       @ASSR         @ASSR-STTEXT	
SM-TEXT ASSR-CPYRT	OK Cancel Ap	ply

# 3. Use the convert coverage annotation tool:



The following menu will open up: If you do not have the map units set in your project you will need to set them to NAD83 State Plane Feet, a warning will pop-up to tell you if they have not been set. Right Click anywhere in the data frame and select properties. Then select coordinate system, then predefined, then Cal State Plain Zone III.

Convert Coverage Annotation

Convert

Close

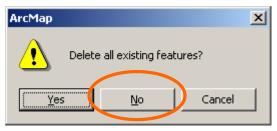
×

# -Select INTO A DATABASE and navigate to AnnoMapPage.

Ex:DatabaseConnections:\asr158\_edit\Assessor.GIS\_ADMIN.Cadastral\_ASR\AnnoMapPage

- Notice the reference scale is set to 1080 or 3600. If it is not, you should stop and re-start ArcMap. The reference scale is important as the font heights are based on this.	Convert annotation from: © 04111.dwg Annotation © Into a Database: AnnoMapPage
<ul> <li>Before converting, make sure everyone is logged off of ArcMap.</li> <li>Select the "Convert" button.</li> </ul>	<ul> <li>Into the Map Annotation Group:</li> <li>Annotation</li> <li>Reference Scale: 1:1,080</li> </ul>
- When text is converted, click "Close"	

# NOTE: Make sure not to delete existing features! Select NO at the following Dialog:



- A dialog box will appear asking if you would like to add the data as a layer to the map. Click "No."
- Turn on AnnoMapPage and turn the CAD drawing off, to make sure that the annotation converted correctly.

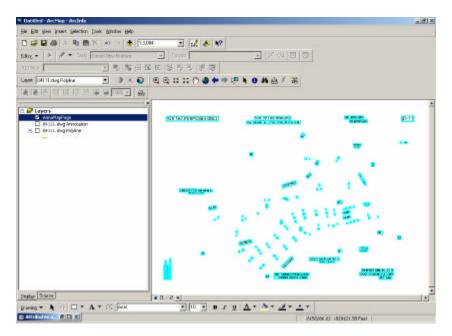
# 4. Enter the MapPage value to be equal to the page you are working on.

(If you have been diligent about calculating the MapPage values, the newly added annotation will be the only ones with null values.)

- Right click on the AnnoMapPage layer in the TOC.
- Move the cursor over Selection and click on "Select MapPage null"

AnnoMapPage	<u>Ba</u>	<u>С</u> ору	1	
AnnoDimensions		Remove		
TaxCodeAreas		Open Attribute <u>T</u> able Ctrl+O		
		Joins and Relates		
BoundaryAnno	æ	Zoom To Layer		
□ □ Condos □ <all other="" th="" val<=""><th>× •</th><th>Visible Scale Range</th><th></th><th></th></all>	× •	Visible Scale Range		
FLOOR				
Condo Fifth F		Selection	¢,	Zoom To Selected Features
Condo First F		Label Features		Clear Selected Features
Condo Fourth		Convert Labels to Annotation	72	Switch Selection
Condo Grouni Condo Seconi	1000	Convert Features to Graphics		Select All
Condo Sixth F	_		-	
Condo Third F		Data	2	Select mappage null
🖃 🗌 MapBooks		Save As La <u>v</u> er File		Sony Records For Selected Features
	P	Properties		Annotate Selected Features
	١ <u>ــــــــــــــــــــــــــــــــــــ</u>	Properties		Create Layer From Selected Features

All of the text from the current page should be highlighted in blue. If there is additional text from other map books then you have a problem and will need to select each piece of text manually.



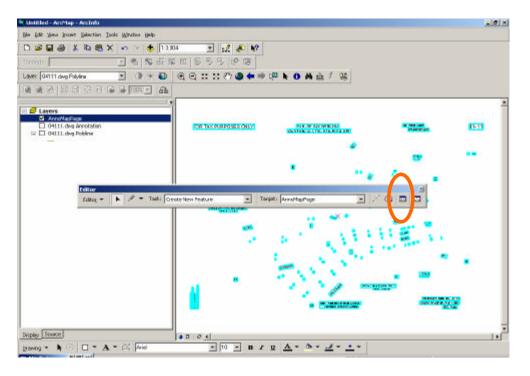
**\*\*Note\*\*** If there are no overlapping Map Pages in your edit view, you can also select all of the text on the page with your Editor or Selection arrow instead of using the "Select MapPage Null" process.

- Click the Editor menu and select Start Editing

# 5. Create an Edit Cache

- Zoom to full extent of the Map Page and click on the "build edit cache" tool.

- Select the attributes tool.



Attributes × 🖃 🎍 nno Map Page Annotation Attributes -Make sure that the FOR TAX PURPOSES ON selected category is 🗄 Tax Area Code Value Property . Text OBJECTID the category being FeatureID edited. 🗄 Assessor's Map No. 41-: ZOrder AnnotationClassID 🗄 County of Santa Cruz, 🤇 Entity ÷.1"= Handle ⊕ Dec. 1998 Layer POR. APTOS RANCHO Color + Text Elevation Thickness **⊕** 41-11 Style FontId · 100' Text\_ Electronically Redrawn 1 Height ±-15 Angle ± 14 SHAPE Length + 4 SHAPE Area ± 20 MapPage ÷-3 ±-5 **±**−6 m 7 + 242 features

- Select the Attributes Tab
- Select MapPage

- Type in the page number next to the MapPage field (xxx-xx format) and hit "Enter"

Attributes		×
- AnnoMapPage	Annota on Attributes	
FOR TAX PLKPOSES ON		1
<ul> <li>Tax Area Code</li> </ul>	Property Value	
i Text	OBJECTID	
E Numbers Shown in	FeatureID	
Assessor's Map No. 41-:	ZOrder	
🔄 County of Santa Cruz, 🤇	AnnotationClassID	
• 1"=	Entity	
	Handle Layer	
E-POR. APTOS RANCHO	Color	
庄 - Text	Elevation	
	Thickness	
	Style	
	FontId	
Electronically Redrawn J	Text_	
<u>+</u> -15	Height Angle	
	SHAPE Longth	
<b>●</b> -4	SHAPE_Area	
	MapPage 041-11	
<b>⊕</b> -3		
<u>+</u> -5		
242 features		

This will calculate the mappage value for all of the text that has just been converted.

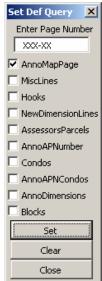
# 6. Set the definition query so that just the text for the current MapPage will show.

- Select the Definition Query tool and  $\sqrt{}$  the box next to AnnoMapPage
- Enter the page number (xxx-xx) in the Page Number box
- Hit the Set button and then the Close button.
- Deselect the annotation.

This will hide any text from adjacent pages.

The AnnoMapPage layer should **only** consist of the following:

- Cancelled APNs
- Block numbers
- Page information
- Map references, and
- Surrounding book and page numbers.

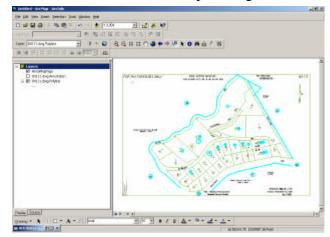


\*\*\* **Delete** all lot numbers, Current APNs, Easements and other Annotation in the AnnoMapPage layer (because this info will be added later by other sources).

# 7. Create the Misclines for the MapPage

- Turn on the AutoCad polyline layer. Simplify this task by turning all other layers off.

- Select Misclines as the target (also have the task at Create New Feature). You can change the selection properties under the main menu - Selection - Interactive Selection properties. Add new features to current selection. This will keep you from having to hold down the shift key.
- Set the Selectable layer to the AutoCad polyline layer.
- Use the Select features tool to select the following:
  - Circles with adjacent page and book numbers
  - Deleted APNs (include circle and dashed line).
  - Adjacent road, water, railroad, section line, township & range, etc. lines.



- Go to Edit in the menu and select copy.

- Select paste in the edit menu.

- Turn off the AutoCad polyline layer and turn on the Misclines layer.

Make sure that all of the features have copied over correctly.

- Pasted features (Misclines) will still be selected.

- Enter the MapPage value for Misclines as performed on pages 5 and 6.

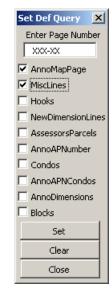
- Click on the Def Query Button and  $\sqrt{Misclines}$ .

- Click Set and Close

# 8. Add Hooks to the Page

- Turn on AutoCad polyline (as a guide)
- Set the target layer to "Hooks"
- Place the hooks in the appropriate places using the pencil tool.

- Rotate Hooks where needed (using the either the editor or selection tools)



To be able to rotate features right click on Hooks in the TOC and select properties. Click the Symbology Tab and select Advanced and Rotation. Click on the down arrow next to "<NONE>" and select Rotation.

- Enter the MapPage value for Hooks as performed on pages 5 and 6.
- Click on the Def Query Button and  $\sqrt{\text{Hooks.}}$
- Click Set and Close

\* If you need to place a hook across a road, it must be drawn in by hand using the pencil tool\*

## 9. Add NewDimensionLines. (Annotation arrows)

Before adding the NewDimensionLines, you must first make sure that your linetype is set to the arrow. Click on the line symbol underneath the NewDimensionLines heading in the TOC and select either "Arrow at start" or "Arrow at end" in the properties dialog box.

- Turn on the CAD polyline layer (for a reference)
- Turn on the NewDimensionLines layer
- Set Target as NewDimensionLines
- Draw arrows over the AutoCad polyline arrows.

- Enter the MapPage value to into the attribute table for

NewDimensionLines as performed on pages 5 and 6.

- Click on the Def Query Button and  $\sqrt{\mbox{NewDimensionLines}}.$
- Click Set and Close

## **10.** Set up labels for AssessorsParcels

- Turn on AssessorsParcels.

- Use Def Query to  $\sqrt{}$  the AssessorsParcels.

- Right click on AssessorsParcels in the TOC and click Properties.

- Select the Labels Tab

- Click "Expression," then select "Load."

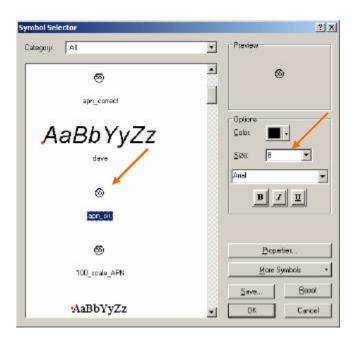
- Navigate to S:/ArcMap/ APN\_Numbers.lxp - Click OK



General Source Selection Display Systemory Fields Definition Query Labers Joins & Relates

- Select Symbol from this dialog box





- Locate the **apn\_cir**. symbol - Set Text Size to 8 (multiply this number by 2 for 200 page, 3 for 300 page, etc.).

- Select Properties

Proviow	Properties
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• - H 100% •	
	.55

# Make sure the type is Marker Text Background

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S 55 e l e c t t	Type Motor Fard Bestground Vote Topen Make TextBestground Symbol Sole nation Vitrer Sole Cotton and	

- Select Symbol

- Set the size for the symbol to 23 (multiply this number by 2 for 200 page, 3 for 300 page, etc.).

- Click OK

You are now done setting up the symbol and text for the page APNs.

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# 11. Convert Labels into Annotation

- Set map scale at 1:1080

- Right Click on Assessor's Parcels

- Select "Label features"

- Select "Convert labels to annotation"

> The following dialog box will appear:

- Select "In a database" and make sure that the destination is set for AnnoAPNumber. Then click "OK."

- If a dialogue box appears

asking you if you would like to delete all existing features, click "No."

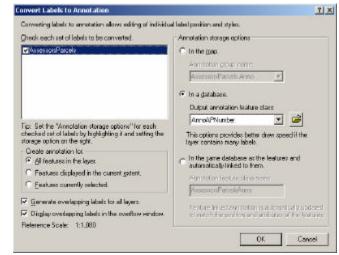
- Set the selectable layer to "AnnoAPNumber."

- Enter the MapPage value for AnnoAPNumber as performed on pages 5 and 6.

- Click on the Def Query Button and  $\sqrt{AnnoAPNumber}$ .
- Click "Set" and "Close."

- Click on the symbol underneath the AssessorsParcels layer and change the color to "Hollow."

# 12. Set Parcel Dimension, Easements, and Lot numbers



- Turn on the AnnoDimensions, AnnoEasements and AnnoLots layer.

- Go to the selection in the main menu.

- Select by location.

- Select the AnnoDimensions, AnnoEasements and AnnoLots that are **within a distance** of 1 foot of the AssessorsParcels layer.

- Enter the MapPage value for AnnoDimensions,

AnnoEasements and AnnoLots as performed on pages 5 and 6.

- Click on the Def Query Button and  $\sqrt{}$  the three Layers.
- Click Set and Close

(**NOTE**: For map sizes other than 100 scale, change annotation size by selecting it with the "select elements" tool and adjusting the font size from the bottom tool bar.)

# 13. Select boundary line that intersects parcels

- Turn on the Boundary layer

- Go to the *Selection* menu.
- Select by location.

- Select the Boundary lines that 'are within a distance of '1 AssessorsParcels layer.

- Click "Apply" and "Close."

- With the editor or selection tool, deselect any unwanted lines from the Boundary selection

Then right click on the Boundary layer in the TOC, go to **selection**, and click **Create layer from Selected Features**.

# 14. Changing the linetype in the Boundary Selection layer

- Once the Boundary Selection layer has been created, right click on "Boundary Selection" and select "Properties."

- Click on the "Symbology" tab, then select "Import" at the top of the window.

- Choose "Import symbology definition from another layer in the map or from a layer file"

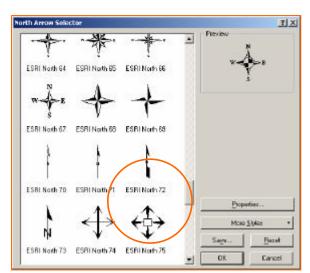
- Navigate to S:/PlatformChange/Assessor.GIS\_ADMIN.Boundary.lyr

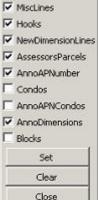
- Click "OK" in all of the windows to return to ArcMap.

# 15. Finalizing in the Layout View

ADDITIONAL NOTES: On the revision notes, you may need to clean up the text by replacing the backslash '\' with a forward slash '/'.

- Select **Insert** from the main menu.
- Select North Arrow
- Select ESRI NORTH 72 then OK
- Right click on Layers
- Select Properties
- Select the Anno Sizing Tab





Set Def Query 🛛 🗙

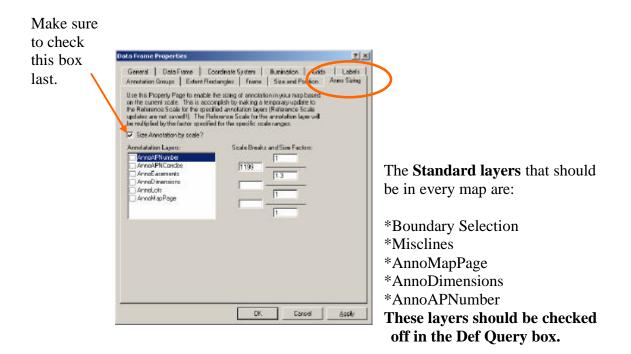
Enter Page Number

XXX-XX

AnnoMapPage

foot of the

 $S:\ArcMap\CAD2GDB\_Procedures.doc$ 



Extras

**Copyright symbol = ALT + 0169** 

# The final step is to export the map page to .pdf format and save it to the same directory.