Deed Reader Pro Manual Version 5.8

Copyright © 2025. All Rights Reserved.

Table of contents

Getting Started System Requirements	. 3
Installation	. 3
Registration and Activation	3
Getting Help	. 5
How To Use	5
Plotting a Deed	5
Plot Window	12
Merged Plot Window	13
Deed Info	16
Using Snipping Tool	17
Curves	19
Configuration Options	19
Info Menu	23
GIS Use	24
Call Recognition Rules	28
Purchasing an Activation Key	31

Getting Started

The inspiration to create Dead Reader Pro came from the desire simplify and reduce the amount of time it takes to plot deeds. Our claim is that with Deed Reader Pro many deeds can be plotted in a matter of seconds.

Please visit the <u>YouTube channel</u> for instructional videos on using Deed Reader Pro.

To view this manual in PDF format here (hold Shift to open externally).

System Requirements

Deed Read Pro requires Windows 8 or later.

Installation

- 1. After downloading Deed Reader Pro run DeedReaderProSetup.exe.
- 2. Follow the on screen prompts.
- 3. During installation, an Optical Character Recolonization (Terreract-OCR) engine will be installed. It will be installed silently in the background.
- 4. After the installation has been completed you will be prompted to select Finish and launch the program.

🚬 Setup - Deed Reader Pro version	3.3 — 🗆 X
	Completing the Deed Reader Pro Setup Wizard
	Setup has finished installing Deed Reader Pro on your computer. The application may be launched by selecting the installed shortcuts.
ION	I Launch Deed Reader Pro
	Finish

Registration and Activation

You will be required to fill out a User Registration Form before you begin using Deed Reader Pro. Fill out your name, company and email and the press **Request Demo Activation Key** to get a free activation key that will be valid for 30 days.

Deed Reader Pro		- • ×
Select Deed to Process		(i) 🏚
Processing Mode: () AI Transc	<i>Tibe & Parse</i>	
Process Deed Text	User Registration Vser Registration Name: Company: Email: How did you hear about DRP: Request Demo Activation Key Activation Key: Activation Key: Purchase Activation Key For help with activation keys and subscriptions contact: support@deedreaderpro.com	Tract: 1 able Updates: II rve R Curve DA Curve Len Radial
POB N: 5,000 E: 5	000 Line Layer: Deed Deed	
	Text Layer: Deed Text Info:	
	File Deed lext Color: ByLayer	
Point File Deed File Closure	Report Status: Please register to use this progra	am.

Note that your computer must have an internet connection to be able check that your activation key is valid when the program is first launched.

After you register a welcome message will be displayed prompting you to choose between CAD / Survey Mode and GIS / Title Mode.



After you make this selection a Quick Start Guide will open.

Getting Help

Help can be obtained by emailing support@deedreaderpro.com.

Please visit the <u>YouTube channel</u> for instructional videos on using Deed Reader Pro.

If you encounter any bugs or issues with Deed Reader Pro not working as expected please email a report of the issue along with the deed or document that caused the issue to <u>support@deedreaderpro.com</u>.

How To Use

This topic describes the graphical user interface and how to use it.

Plotting a Deed

The graphical user interface is designed to work starting from top and then working towards the bottom in the process of plotting a deed.

Deed Reader Pro will display tooltips when the cursor hovers over buttons, options and the line types in the Call Table. Tooltips display helpful text that describe how to use Deed Reader Pro. This option can be disabled from the Configuration menu.

Deed Reader Pro	
Select Deed to Process	
Processing Mode: O AI 7	The first step in plotting a deed is to use this button to select a file or files to be processed. The file can be a PDF, image, Word, text file or saved Deed Reader Pro Deed file. The Default Processing Mode can be set by the context menu options when you right click on this button

The first step in plotting a deed is to choose the deed to process with Select Deed File to Process. The file can be a PDF, image, Word, text file or saved Deed Reader Pro Deed file. The length of time it takes to read the file depends on the number of calls in the deed.

The Paste button can be used load an image or text from the clipboard. Images can be stored the clipboard with the Windows program, Snipping Tool. This is useful to reduce the processing time for a long PDF with multiple metes and bounds descriptions by clipping out a single metes and bounds description. Multiple snips can be pasted into Deed Reader Pro if multiple snips are needed to capture the full deed

to process the image or images loaded from the clipboard. description. Press the

Processing Mode displays the method that was used to process the deed and allows you to toggle between processing modes. The Default Processing Mode is indicated by italic font and is the processing method used when a file is opened and processed for the first time. The Default Processing Mode can be set by the context menu option when you right click on one of the modes or you right click on the Select Deed to Process button.

Processing Modes

Al Transcribe & Parse - the deed is transcribed by Al and the calls are parsed and extracted by Al. This is the setting that will provide the best results and processing should typically always be done in this mode. Al processing is done in the cloud using Google Gemini.

Al Transcribe - the deed is transcribed by Al but calls are parsed and extracted by Deed Reader Pro. This setting will process the deed the quickest and typically provides good results but does not parse deeds as well as AI.

OCR & Machine Parse - the deed is processed with the built in OCR (optical character recognition) engine and the calls are parsed and extracted by Deed Reader Pro. This method was developed before AI was able to transcribe and parse deeds and is inferior to using AI to transcribe deeds.

After a file has been selected, processing will begin and the transcribed text will be displayed in the Deed Text window after the deed has been transcribed to text.

In the top right corner are <u>Configuration</u> \mathbf{x} and <u>Info</u> (i) buttons. The Configuration button allows the user to select different options and settings for the program while the Info button has a links to the manuals, User Registration and License Agreement.

After a deed has been processed the extracted calls will be displayed in the **Call Table**. The data in a cell of the Call Table can be manually edited by clicking on the cell. If you click on a cell and begin typing, the existing contents of the cell will be replaced. If you double click on a cell the contexts of a cell will be highlighted with the cursor displayed at the end. Triple clicking on a cell will unselect the text and bring the cursor to the end of the text. A deed can manually be entered into the Call Table if desired. Right clicking on the Call Table (screenshot below) will present options to add and delete rows, **Clear the Call Table** and **Deed Text** and **Adjust This Call to Force Closure**. Row can be added and removed to the end of the Call Table with "CTRL +" and "CTRL -" keyboard shortcuts. **Adjust This Call to Force Closure** will calculate the bearing and distance for the selected call so that the deed closes.

)	Distanc	е	Description	Passing Dis	Passing Desc	
	48 poles 18	links	Stone			
	1 poles		Delete This Row	1		
	47 poles		Add a Row Before This Row			
	24 poles		Add a Row Afte	r This Row		
			Adjust This Call	to Force Closur	e	
		Clear Bearing, Distance and Curve Data				
			Clear the Call Ta	able and Deed T	ext	

If using OCR & Machine Parse mode, the Deed Text or Call Table will often need to be corrected before all the calls can be fully recognized. The optical character recognition engine may not recognize all characters correctly and some characters may need to be manually corrected to be able to plot your deed. If corrections to the Deed Text are made, **Process Deed Text** needs to be pressed to process the text and update the Call Table. All edits and corrections to the Deed Text should be made prior to editing the Call Table. All revisions made to the Call Table will be lost when you press Process Deed Text.

When a cell is selected, the corresponding text in the Deed Text window will be highlighted. If the cell is empty the mouse cursor will be moved to the area where the information for that cell is expected to be found. When you click on the text of a call in the Deed Text the corresponding call will be highlighted in the Call Table. These are useful features that can be used when editing the Deed Text.

Right clicking on the Deed Text window will present some useful options in the context menu. There is an option to Clear the Call Table and Deed Text and options to Set Selected Text as Adjoiner and Set Selected Text as Monument.

The first column of the Call Table is **Type** with the following options being available:

- 1. L A Line in the parcel, lines are defined by a bearing (Dir, Deg, Min, and Sec) and distance (Distance).
- C A Curve in the parcel, curves are defined by the chord bearing, distance, curve direction (Curve Dir) and curve radius (Curve R). From these values the curve delta angle (Curve DA) and curve length (Curve Len) are calculated. Curves are always assumed to have a delta angle less than 180 degrees.
- 3. **TL** A **Tie Line** is a reference line to a point or monument. Tie lines are also used for commencement calls that lead to the Point of Beginning. Tie lines are plotted in the direction that lead to the monument or point at the end of the previous call or to the Point of Beginning when the Call Table begins with TL calls. Tie Lines examples are shown in Example Deed 3.
- 4. TL+ A Tie Line Continuation is a line extending from the end of the previous Tie Line
- 5. **RTL** A **Reverse Tie Line**, Reverse Tie Lines are the same as Tie Lines but plotted in the opposite direction, from the previous monument or point to the monument or point described in this call. Reverse Tie Lines are a selectable option in the Call Table but are currently read

from the Deed Text.

- 6. **RTL+** A **Reverse Tie Line Continuation** is a line extending from the end of the previous Reverse Tie Line.
- 7. **TC -** A **Tie Curve**, similar to a Tie Line but a curve
- 8. TC+ A Tie Curve Continuation, similar to a Tie Line Continuation but a curve
- 9. **RTC -** A **Reverse Tie Curve**, similar to a Reverse Tie Line but a curve. Reverse Tie Curves are a selectable option in the Call Table but are currently read from the Deed Text.
- 10. RTC+ A Reverse Tie Curve Continuation, similar to a Reverse Tie Line Continuation but a curve

Reverse Tie Lines and Reverse Tie Curves are currently only options that can be selected in Call Table and these types are not read from the Deed Text.

The second column of the Call Table is the Direction (**Dir**) column. Direction: the direction of line or curve. The acceptable entries are **NW** or 1 (northwest), **SE** or 2 (southeast), **SW** or 3 (southwest), **NE** or 4 (northeast), **R** (angle right), **L** (angle left), **DR** (deflecting right), **DL** (deflecting left), **I** (interior angle with right or left direction as set in the Configuraion menu), **I(L)** (interior angle turning left, parcel progresses in a clockwise direction) and **I(R)** (interior angle turning right, parcel progresses in a counterclockwise direction). A bearing in Qdd.mmss format can also be entered in this field.

The **Deg**, **Min**, **Sec** and **Distance** columns are for Degrees, Minutes, Seconds and Distance. The degree column can accept decimal degrees. The distance column will accept distances in units of feet, meters, poles, rods, perches, chains, links, yards and vara. The distances will be converted to feet or meters as specified by the "Plot Units" setting. Multiple distances can be entered into a distance cell and the will be added together for a total distance when plotted and processed. For example "10 chains 2 poles 5 links" could be entered for a total distance of 10 x 66 + 2 x 16.5 + 5 x 0.66 = 696.30 feet.

The **Description** is used for the monument description.

Passing Dis and **Passing Desc** in the call table displays the distance and description of monuments being passed in calls. Multiple passing distances and monuments separated by commas can be entered into these cells. If there are less descriptions of monuments entered than distances, the last monument description will be used for the distances without a stated monument description.

The **Adjoiner** column will display descriptions of the adjoining parcels and will be plotted in CAD unless the Adjoiner column is disabled in the Configuration Options.

The last 8 columns are used to display curve data when the call is a curve. Inputs used for curve calculations are displayed in a normal font while calculated vales will be displayed in italic font. More information about entering curve data is provided in <u>Curves</u> section of this manual.

Deed Reade	er Pro								
Select Dee	d to	Proces	s	Fil	e: OR_537	_744.PDF			(i)
rocessing N	1ode	• A	Tran	scrib	e & Parse	AI Transcribe OCR & Machine Pars Deed Text	e		
Situate in th	ne To	wnshi	p of S	pring	field in th	e County of Ross and the State of Ohio. S	Section #1, 7	18, R 21 and	being a part of the same premises
is conveye	d to	Harold	True	and	recorded	in Volume 324, page 6 bounded and desc	ribed as fol	lows to wit:	
Beginning wned by Penningto	ata Mary n N (railro M. Pe deg.	ad sp ennin 27' E	ike iı gton 1471	n the cen , being a 1.97 feet	terline of True Hollow Rd., said spike b Iso in the east line to the tract of which to an iron pin in the line of the tract of v	eing the So this is a pa vhich this i	outhwest con art, thence w is a part	rner to a 63.00 Acre tract as now ith the west line of Mary M.
hence wit	h a r	ew lir	e thr	ough	n said tra	ct S 89 deg. 27' W. 608.99 feet to an iror	n pin at the	base of a pi	ne tree,
hence wit	h an	other	new l	ine S	6 15 deg.	01' W 285.85 to a spike in the center of	said road p	passing an i	ron pin at 268.95 feet.
hence wi	th th	e cent	er of	said	road the	following seven (7) courses S 42 deg.	34' E 111.10) feet to a sp	vike
6 37 deg. ()0' E	421.4	0 feet	to a	spike,				
6 31 deg. ()0' E	190.9	0 feet	to a	spike,				
3 25 deg. 1	14' E	92.10	feet	to a s	spike,				
6 16 deg. (01' E	260.3	0 feet	to a	spike,				
5 20 deg. ()8' E	198.0	0 feet	to a	spike				
					<u> </u>		_		1
rocess De	ed Te	xt Vi	ew Hi	ghlig	hted Ima	ge Load Orthoimage		ract: 1 🤤	
Type	Dir	Dea	Min	Sec	Distance	Description	Passing Dis	Passing Desc	
1. 1	NE	0	27	0	1/71 97'	Iron Pin	r assing bis	r ussing bese	with the west line of Mary M. Penningto
		80	27	0	608.00'	Iron Pin At The Base Of A Pine Tree			with a new line through said tract
		45	4	0	205 05'	Spike In The Center Of Said Boad	269.05	Iron Din	with a new line unough said tract
		10	1	0	200.00	Spike in the Center Of Salu Road	200.95		with the center of soid road
		42	34 0	0	111.10				with the center of said road
	SE	31	0	0	421.40	Spike			with the center of said road
	SE	31	0	0	190.90	Spike			with the center of said road
	SE	25	14	0	92.10	Spike			with the center of said road
	SE	16	1	0	260.30	Spike			with the center of said road
	SE	20	8	0	198.00'	Spike			with the center of said road
		36	20	0	110.00'	Kailroad Spike in the Centerline of true Hollow Rd., Said Spike Being The Southwest Corner To A 63.00 Acre Tract As Now Owned By Mary M. Pennington, Being Also In the East Line To The Tract Of			with the center of said road
) L -	SE					Which This Is A Part			
0 L •	SE					Which This Is A Part			
0 L •	D00		E:	5,00	0	Which This Is A Part Line Layer: Deed Deed Text Layer: Deed Text Info:	Harold W. Tr Volume 537,	ue and Wanda Le Page 744	e True
0 L • 0B N: 5,0	000	utoCAI	E:	5,00 (F Fi l	0 e) (Deed 1	Which This Is A Part Line Layer: Deed Text Layer: Deed Text Color: ByLayer	Harold W. Tr Volume 537,	ue and Wanda Le Page 744	e True

View Highlighted Image will generate a .png image of the original PDF or image file with the calls highlighted to match the corresponding colors in the Deed Text and Call table. This is helpful for reviewing the deed and Call Table.



The .png image will open in the default program that Windows associates with .png files. <u>IfranView</u> is a simple and lightweight photo viewer that works well for this application and you may wish to set it as the default program for PNG files. To do this, right click on a PNG file, then select Open With > Choose another app > select IfranView and check the "Always use this app to open .png files". When using IfranView the "+" and "-" keys or "ctrl" and the mouse wheel can be used to zoom in and out on the image.

Load Orthoimage is used to load an orthoimage into your CAD program (AutoCAD or IntelliCAD). GeoTIFF and Mr. Sid formats are supported. Images are automatically inserted with the correct scale and origin coordinates. For Mr. Sid files both the .sid and .sdw file are needed and should have the same name and be located in the same folder. The ability to load orthoimages was added so that plotted deeds can easily be overlaid on aerial imagery with state plane coordinates so that surveyors have approximate coordinates to search for monuments in the field. Known statewide orthoimage repositories are listed at <u>Statewide Orthoimage Repositories</u>.

Tract specifies which metes and bounds description from the selected file is being shown and processed.

In the above example the 2nd tract in the PDF file is shown. The Plus 🕈 and Minus 🚥 buttons are used to increase and decrease which tract is shown and processed. The Plus button becomes available when more than 1 tract is found in a file.

Call Table Updates - Press the Pause button to pause automatic recalculation updates of Call Table. When paused the Call Table will not automatically recalculate after data is a cell is changed. This can be used to allow faster data entry into the Call Table, especially when the plot window is open or it can be helpful when trying to enter curve data. Press the Refresh button to update the Call Table when table updates are paused.

POB / POC is used to specify the northing and easting coordinates for the point of beginning or the point of commencement. Press this button to toggle between selecting the POB or POC. The POC option is only available when there are commencement calls that lead to the POB at the beginning of the description. These coordinates are used when DXF and point files are saved.

Plot will generate a plot of the deed in a new window. See the <u>Plot Window</u> section of this manual for information about the Plot window.

Plot in AutoCAD or Plot in IntelliCAD will plot the deed in AutoCAD or IntelliCAD. You can specify rather

you have AutoCAD or IntelliCAD in the Configuration 🌄 menu

DXF File will save a DXF file that can be opened in your CAD program.

Deed Text will save the Deed Text to a text file.

Point File will save a coordinate file in Point Number, N, E, Description format.

Deed File will save a .drp (Deed Reader Pro) file that can be opened in Deed Reader Pro to restore the

current deed.

Closure Report will save a closure report for the tract.

Line Layer sets the layer for the line work in your CAD program.

Text Layer sets the layer in your CAD program that the text labels are contained in.

Color sets the color for the lines and text in CAD

Deed Info displays information that is extracted from the deed when transcribed with AI. The following fields are extracted: Deed Type, Grantee, Grantor, Record (Volume and Page), Prior Record, Date Recorded, County, Tract Title, Called Area, PLSS Reference, Parcel Number and Address. Press the Deed Info button to view a table with all the fields and to show the option to save the deed information to a Word or Excel file. The information in Deed Info window in the main window can be displayed and plotted in the plots and in CAD. To customize the format and fields displayed, right click on the window and select Configure Displayed Deed Info. This topic is covered in further detail in the Deed Info section of this manual.

Closure Error is the distance and bearing between the point of beginning and last point.

Area is the area of the parcel.

Plot Window

The Plot Window can be opened by pressing the Plot button in the main window.

The Zoom Extents & buttons zooms to the extents of the plot.

The Zoom Q button zooms in on a window with the left mouse button and zooms out when a window is selected with the right mouse button. The mouse wheel can also be used to zoom in and out.

Pan 🍽 button allow you to pan the plot while holding down the right mouse button and zoom in and out while holding the left mouse button. To zoom in hold down the mouse and drag diagonally up or to the right. To zoom out drag it diagonally down or to the left.

K button will display the mouse cursor. When in this mode the text labels, the Call Table The Select and the north arrow can be moved and re-positioned by clicking on these items and then dragging them. Note that when the plot is updated or resized, the positions of these items will be reset.

button in the Plotted Deed window will open the Plot Configuration Options screen. The Configuration In this screen you can specify what is plotted on the plot, the text sizes, the plot size and rather or not to show a border.

The Print 4 button will allow you to view a print preview of the plot and then print it.

button will save an image or PDF of the plot. The Save

The Merge III button is used to combine multiple tracts into a single plot. When you press it will add the current tract to a new Merged Plot Window. Additional tracts can then be added to this plot by pressing the Merge button again after another tract is plotted.



Merged Plot Window

The Merge button in the <u>Plot Window</u> is used to combine multiple tracts into a single plot. When you press it will add the current tract to a new plot. Additional tracts can then be added to this plot by pressing the Merge button again after another tract is plotted. Tracts sent to the Merge Plot will remain in this plot

until this window is closed. Tracts from multiple different documents can be added.



Example of 3 tracts from the same document

The following options are available to manipulate tracts in the Merged Plot window.

Move - To move a tract you can click anywhere inside the tract and drag it to a new location while holding down the left mouse button. If you click and hold a node of the tract and drag near a node of another tract, the dragged tract node will snap to the node where it is released.

Rotate - You can rotate a tract by clicking and holding the right mouse button on a line of tract, then drag to the line of another tract and when you release the mouse button the line and tract will rotate to match the line where it is released.



Example of 3 tracts from the same document after being rotated and moved together

Right Click Context Menu Options - If you right click on a tract you will be presented options to change the Color of the tract, turn the Fill on and off, adjust the Lineweight, turn the Nodes on and off, turn the Label on and off, Lock the tract to prevent it from being moved and rotated and an option to Delete the tract.

Color	►	
Fill	•	
Lineweight	••	
Nodes	•	
Label	•	
Lock	•	
Delete Tract		
Cancel		

Deed Info

When deeds are transcribed with AI metadata from the deed is automatically extracted.

Press the **Deed Info** button to view a table with all the extracted metadata.

🛯 Deed Info 🛛 🕹 🗙				
	Deed Info			
Filename:	OR_203_11.PDF			
Deed Type:	Quit Claim Deed			
Grantee:	Roger E. Swaney and Ruthie D. Swaney			
Grantor:	Roger E. Swaney			
Record:	Volume 203, Page 11			
Prior Record:	Volume 560, Page 0170, Volume 190, Page 476, Volume 314, Page 597, Volume 424, Page 679, Volume 462, Page 279			
Date Recorded:	02/15/2002			
County:	Ross			
Tract Title:	Tract One			
Called Area:	300 acres of land, more or less			
Calculated Area:	300.097 Acres			
Closure Error:	S 37°10'51" W 4.75'			
PLSS Reference:	Section No. 3 township No. 7 and range No. 20 and 247 84/100 acres a part of the northeast, southeast and southwest quarters of section No. 34, township No. 8 and range No. 20			
Parcel Number:	18-0501075.000, 18-0505013.000, 18-0506027.000, 18-0505011.000			
Address:				
Save Deed Info	Tract: 1			

The **Save Deed Info** button can be used to save the Deed Info to a Word or Excel file. If an existing file is selected, the data will be appended to the existing file.

The Configuration button is used to show the configuration options for the Deed Info table. Currently, there is an option to hide the PLSS Reference which can be enabled if you do not work in a PLSS state.

The Plus racts and Minus re used to switch between tracts in the document when multiple tracts are found.

By default, the Grantee and Record (Volume and Page) are displayed in the Deed Info window of the main window. The information in this window can be plotted in CAD and in the plots when the options for this are enabled.



Roger E. Swaney, Ruthie D. Swaney, Douglas E. Swaney, and Debra L. Congrove Volume 203, Page 11

The Deed Info window

The format and fields in the Deed Info window can be configured by right clicking on the window and selecting **Configure Displayed Deed Info**.

Configure Deed Info	×				
	Configure Deed Info				
The Deed Info can be configu	red with custom configurations. The following fields are available:				
Filename - The filename of the deed Deed Type - The type of deed Grantee - The grantee of the deed Grantor - The grantor of the deed Record - The volume and page of the deed record Prior Record - The volume and page of the prior deed record Date - The date the deed was recorded County - The county in which the deed was recorded Title - The title of the tract Called Area - The called area of the tract PLSS Reference - The PLSS reference of the tract Parcel Number - The parcel number of the tract					
To use one of these fields as that were not able to be extra	a vairable enclose it with braces. Fields that are not available or icted from the docuement will be omitted.				
Default Configuration:	Example with field labels:				
{Grantee} {Record} {Title}	Grantee: {Grantee} Docuement: {Record} Record Date: {Date} County of {County} Title: {Title} Called Area: {Called Area} PLSS Reference: {PLSS Reference}				
	Deed Info Configuration				
{Grantee} {Record}					

Using Snipping Tool

You may find it useful to isolate a deed from a PDF or image file using Snipping Tool. This is useful if the deed is contained in a very long PDF with many metes and bounds description and you want to isolate a single metes and bounds description to be plotted.

Snipping Tool is included with Windows. To launch search for "snipping" in the search bar and then click on "Snipping Tool".



Click **New** to create a new snip.



Select the portion of text that contains the deed description from your PDF or image. Then copy the image to the clipboard.

The Paste used button in Deed Reader Pro can then be used load the image into Deed Reader Pro. Multiple snips can be pasted into Deed Reader Pro if multiple snips are needed to capture the full deed

description. Press the L to process the image or images loaded from the clipboard.

Curves

The chord bearing and distance, curve direction (right, left or concave direction), curve radius, curve length, radial bearing and tangential bearing (Bearing In) are read from the deed text. Curves are now calculated the following ways in this priority with the curve direction being required for all methods:

- 1) Chord Bearing, Radius, Delta Angle
- 2) Chord Bearing, Chord Distance and Radius
- 2) Radius, Delta Angle and Radial Bearing
- 3) Radius, Delta Angle and Tangent Bearing In
- 4) Radius, Curve Length and Radial Bearing
- 5) Radius, Curve Length and Tangent Bearing In
- 6) Radius, Delta Angle and Tangential
- 7) Chord Bearing, Radius, Curve Length
- 8) Chord Bearing, Radius, Curve Length
- 9) Chord Bearing, Chord Distance and Curve Length
- 10) Radius, Delta Angle and Tangential
- 11) Radius, Curve Length and Tangential
- 12) Chord Distance, Arc Length and Tangential

The curve Right or Left direction can be calculated from a valid concave direction in cases in which the curve right or left direction do not have the same concave direction.

Curves with delta angles greater than 180 degrees can be calculated by entering a delta angle greater than 180 degrees.

The Tangential column will display Yes if end of the curve is within 0.02' of the correct coordinates for a tangential curve. You can manually enter Yes to force curves to be tangential. When a chord bearing, radial bearing and tangent bearing in are not provided, the curve will be assumed to be tangential so that it can be calculated.

Calculated values are displayed in a light italic font while inputs used for curve calculations are shown in a bold font.

There is also an option to clear all the "Clear Bearing, Distance and Curve Data" for the current row when you right click on a row in the Call Table. This is useful if you need to reset the curve data.

In the Call Table, the delta angle can be entered in the format of "83 37 14". Accepted entry formats for the Radial Bearing and Bearing In include: N15d15m15sE, N15 15 15E, N15-15-15E and Qdd.mmss format.

Configuration Options

The Configuration the button allows the user to select different options and settings for the program.

Configuration Options X			
Mode CAD / Survey O GIS / Title			
CAD Settings			
CAD Package: AutoCAD IntelliCAD progeCAD Version: Plot Monument Descriptions Height: 8.0 Plot Adjoiners Height: 8.0 Plot Bearing and Distance Labels Height: 8.0 Plot Area and Closure Height: 8.0 Plot Area and Closure Height: 8.0 Include Deed Info text with Area and Closure Deed Info Format Set Line Layer to Filename Set Text Layer to Filename + _Text Plot Closure Precision with Area and Closure Locate Description Labels Inside the Parcel Align Adjoiner Labels with Lines Create Groups For Lines and Text Apply Scale Factor: 1.0 Orthoimage Layer: Ortho Delay between Commands: 0 ms			
Default Processing Mode			
 AI Transcribe & Parse			
Units • Feet • US Survey Feet • Meters Vara Units: • Texas • California			
General and User Interface			
 Disable Tooltips in Main Window Format Text in All Caps Show Adjoiners Column Include "Set" and "Found" in Monument Descriptions Include Leading Zeros in Bearings Default Direction for Interior Angles: L / CW R / CCW 			
OCP Process Settings			
Remove Watermarks Low High			
Correct Skewed Text			
Isolate Metes and Bounds Descriptions in Deed Text			
CR Page Seperation Mode: Single Column Automatic			

<u>Mode</u>

Deed Reader Pro has two modes that the user can choose between.

CAD / Survey mode will optimize the interface for CAD users and surveyors.

GIS / Title mode will optimize the interface for GIS users and Title industry users. This mode removes the CAD commands. It will add an option to export a Traverse File that can be imported in ArcGIS Pro. GIS users should see the section in this GIS section in this manual.

CAD Settings

CAD Package allows you to select which CAD program to plot the deeds into, AutoCAD, IntelliCAD or progeCAD.

Plot Monument Descriptions plots the monument descriptions as text objects in your CAD program. The height of the text is set with the Height setting.

Plot Adjoiners plots the adjoiners in CAD.

Plot Bearing and Distance Labels plots the bearings and distances along the lines in CAD. Labels that do not fit are added to a table.

Plot Area and Closure plots the area and closure of the tract in CAD.

Include Deed Info text with Area and Closure plots the Deed Info above the area and closure of the tract.

Deed Info Format allows you to format and customize the text displayed in the Deed Info window in the main window.

Set Line Layer to Filename sets the line layer to the name of the filename.

Set Text Layer to Filename +_text sets the text layer to the name of the filename + _text.

Plot Closure Precision with Area and Closure plots the precision along with the Area and Closure. Plot Area and Closure must be enabled for the closure to be plotted with it.

Locate Description Labels Inside the Parcel will locate the text for monument descriptions inside the boundary polyline of the parcel when checked.

Align Adjoiner Labels and Lines will rotate the text of the adjoiner labels to be aligned with the lines with when checked.

Create Groups For Lines and Text will created in a Group in CAD. When one item in a group is selected, all the items in that group will be selected. This makes it simple to move and rotate all the lines and text of a deed together.

Apply Scale Factor will apply a scale factor for CAD. This can be used to input a ground-to-grid scale factor if you want to plot the deed in a grid coordinate system.

Orthoimage Layer sets the layer for orthoimages when they are loaded into your CAD program.

Delay between Commands defines the delay in milliseconds between commands sent to AutoCAD during plotting to AutoCAD. On some computers, sending commands without delays between the commands may cause an error and the plot will not complete. If this happens this value should be increased until errors no longer occur. Acceptable values are integers between 0 and 200. On most machines this can be set to 0.

Default Processing Mode

Default Processing Mode defines how the default mode for how the deed will be processed when a deed is selected with Select Deed to Process.

Al Transcribe & Parse - the deed is transcribed (converted to text) by Al and the calls are parsed (extracted to the Call Table) Al. This is the setting that will typically provide the best results. Al processing is done in the cloud using Google Gemini.

Al Transcribe - the deed is transcribed by Al but calls are parsed and extracted by Deed Reader Pro. This setting will process the deed the quickest and typically provides good results but does not parse deeds as well as Al.

OCR & Machine Parse - the deed is processed with the built in OCR (optical character recognition) engine and the calls are parsed and extracted by Deed Reader Pro. This method was developed before AI was able to transcribe and parse deeds and is inferior to using AI to transcribe deeds.

Al Tokens Remaining displays how many tokens remain for your account. Processing a deed with Al requires token credits to cover the compute costs. Subscription plans include 4,000,000 tokens a month for Al usage and unused tokens are accumulated and rolled over each month. Al tokens are the basic units of text that Al language models use to process information with. Handwritten deeds in cursive require the use of a more advanced and expensive Al model and a multiplier is applied to adjust the token usage for the cost increase. Cursive deeds require more tokens to process and are more expensive to process. Very long deeds (typically over 80 calls) also require a more advanced model be used and a token multiplier is applied when this model has to be used.

Purchase Tokens is used to purchase additional token credits. More token credits can be purchased if needed and tokens to not expire as long as there is an active subscription.

Processing Mode	Estimated Tokens Used	Estimated Number of Deeds That Can Be Processed with 4,000,000 Tokens	
Typed Deed with 20 Calls	10.000	100	
(Transcribe and Parse)	10,000	400	
Typed Deed with 20 Calls (Parse	2 200	1720	
Only)	2,300	1/39	
Cursive Deed with 7 Calls	20.250	107	
(Transcribe and Parse)	29,250	13/	

Token Usage Estimates

<u>Units</u>

Plot Units allows the selection of feet, US survey feet or meters. All units will be converted to the selected option when plotted. When saving a DXF file, units are specified for the file with these units.

Vara Units allows the selection between Texas vara and California vara standardizations. A vara is a Spanish unit of length that has been used in surveys that were once part of Spanish territories, such as Texas, California and New Mexico. 1 Texas vara = 33 1/3 inches (2.777777777778 feet), 1 California vara = 33 inches (2.75 feet)

General and User Interface

Disable Tooltips in Main Window will disable tooltips that are shown in the main window. Tooltips for line types in the Call Table will not be disabled. Tooltips are displayed when the cursor is hoovered over buttons and options in Deed Reader Pro.

Format Text in All Caps is used to formal all monument and adjoiner text in all caps.

Show Adjoiners Column will show the Adjoiners column in the Call Table. The keywords "with" and "along" are used to determine where the adjoiner description starts. Adjoiners are plotted in CAD if enabled.

Include "Set" and "Found" in Monument Descriptions enabling this setting will cause "Set" and "Found" to be included in monument descriptions.

Include Leading Zeros in Bearings show the leading zeros in bearings, for example: N7°5\'3"W will be displayed as N07°05\'03"W when enabled.

Default Direction for Interior Angles defines the default direction for interior angles when it is not specified in the deed. You can choose "Left / Clockwise" or "Right / Counterclockwise".

OCR Process Settings

These settings were important before DRP had the ability to use AI but are now only relevant when processing in OCR mode (not recommended).

Remove Watermarks is used to apply a threshold filter to remove watermarks. A threshold filter is a simple image processing technique used to adjust the pixel values in an image based on a specified threshold value. This method can be applied to remove watermarks from images and PDFs by isolating and eliminating watermark patterns that are in a lighter shade of gray from the text. You should start with the threshold filter at the low level and progressively move it to the high level until the watermark is mostly removed and the text can be read by the OCR engine. When this option is enabled a **View Image** button will appear that will show the image with threshold filter applied.

Correct Skewed Text will attempt to straighten text if it is skewed in the PDF of image. Text that is skewed may not able to be read by OCR especially if Page Seperation Mode is set to Single Column. This setting is enabled by default every time Deed Reader Pro starts.

Isolate Metes and Bounds Descriptions in Deed Text will display only deed descriptions in the selected file and hide the extra text contained in the file.

Format Deed Text with Blank Lines Between Calls formats the Deed Text to have paragraph returns between each call. When this option is off there are paragraph returns at the end of each line.

OCR Page Seperation Mode is a setting for the OCR (Optical Character Recognition) engine. The Automatic setting will recognize blocks of text in the document but there may be issues with calls in a list in this mode. The Single Column setting will assume the text is in a single column and work best for calls in a list. The Single Column setting will not do as well when the text is skewed and Correct Skewed Text should be used with it. 'Single Column' mode is set to the default every time Deed Reader Pro starts.

Info Menu

The Info button displays the current version of Deed Reader Pro and has buttons to open the Manuals, Quick Start Guides, <u>User Registration</u>, <u>Purchase Window</u>, Release Notes and License Agreement.



GIS Use

GIS users should change the **Mode** to **GIS** by opening the Configuration menu and selecting this option.

Configuration Options X
Mode CAD / Survey • GIS
GIS Settings
Include Commencement Calls in Traverse Files
Default Processing Mode AI Transcribe & Parse • AI Transcribe · AI Cursive · OCR AI Tokens Remaining: 11,142,783 Purchase Tokens
Units • Feet · Meters Vara Units: • Texas · California
User Interface Disable Tooltips in Main Window Show Adjoiners Column Color Code Calls
OCR Process Settings Remove Watermarks Low Correct Skewed Text Isolate Metes and Bounds Descriptions in Deed Text Format Deed Text with Blank Lines Between Calls OCR Page Seperation Mode: Single Column

GIS mode will optimize the interface for GIS users and remove the CAD commands. It will add an option to export an Esri Traverse File that can be imported in ArcGIS Pro.

Deed Reader Pro – 🗌 🗙					
Select Deed to Process File: OR537Page872.pdf					
Processing Mode: • AI Transcribe & Parse AI Transcribe AI Cursive OCR & Machine Parse					
Also excepting the following described real estate conveyed to Lee W. Dearth and Marguerite E. Dearth by Francis L. Dearth and Doris M. Dearth by deed recorded in Volume 550, Page 942, Ross County Deed Records: Being in Section 18, Township 8, and Range 21. Beginning at a set PK nail located at the center line intersection of Marietta Road and Marshall Road (formerly Seney Road) at the northeasterly corner of Francis L. Dearth and Doris M. Dearth (Volume 514, Page 468);					
thence with the center line of Marietta feet to a set P.K. nail:	Road and the easterly line	of Dearth,	South 28 de	grees 50' 45" West, 151.93	
and Doris M. Dearth: (1) North 80 degrees 57' 50" West 226.46 feet (passing a set 5/8" rebar at 21.26 feet) to a set 5/8" rebar; (2) North 09 degrees 02' 10" East 139.80 feet (passing a set 5/8" rebar at 119.80 feet) to a set 5/8" rebar in the center of Marshall Road (formerly Seney Road); thence with the center of Marshall Road and the northerly line of Dearth, South 81 degrees 36' 38" East 277.97 feet to the point of beginning.					
<u>Call Table</u>					
Type Dir Deg Min Sec Distance	Description	Passing Dis	Passing Desc	Adjoiner	
1 L • SW 28 50 45 151.93	P.K. Nail			with the center line of Marietta Road	
2 L <u>v</u> NW 80 57 50 226.46'	5/8" Rebar	04.001		and the easterly line of Dearth	
		21.20	5/8" Rebar	and the easterly line of Dearth	
3 L ▼ NE 9 2 10 139.80'	5/8" Rebar	21.26 [°] 119.80'	5/8" Rebar 5/8" Rebar	and the easterly line of Dearth	
3 L VE 9 2 10 139.80' 4 L SE 81 36 38 277.97'	5/8" Rebar PK Nail Located At The Center Line Intersection Of Marietta Road And Marshall Road (Formerly Seney Road) At The Northeasterly Corner Of Francis L. Dearth And Doris M. Dearth (Volume 514, Page 468)	21.26° 119.80'	5/8" Rebar 5/8" Rebar	with the center of Marshall Road and the northerly line of Dearth	
3 L Image: NE 9 2 10 139.80' 4 L Image: SE 81 36 38 277.97'	5/8" Rebar PK Nail Located At The Center Line Intersection Of Marietta Road And Marshall Road (Formerly Seney Road) At The Northeasterly Corner Of Francis L. Dearth And Doris M. Dearth (Volume 514, Page 468)	119.80'	5/8" Rebar 5/8" Rebar	with the center of Marshall Road and the northerly line of Dearth	
3 L ▼ NE 9 2 10 139.80' 4 L ▼ SE 81 36 38 277.97'	5/8" Rebar PK Nail Located At The Center Line Intersection Of Marietta Road And Marshall Road (Formerly Seney Road) At The Northeasterly Corner Of Francis L. Dearth And Doris M. Dearth (Volume 514, Page 468) Title:	21.20 ⁻ 119.80 ⁻	5/8" Rebar 5/8" Rebar	with the center of Marshall Road and the northerly line of Dearth	
3 L NE 9 2 10 139.80' 4 L SE 81 36 38 277.97' Point of Beginning X: 5000 Y: 5000 Plot	5/8" Rebar PK Nail Located At The Center Line Intersection Of Marietta Road And Marshall Road (Formerly Seney Road) At The Northeasterly Corner Of Francis L. Dearth And Doris M. Dearth (Volume 514, Page 468) Title: Deed Text Color: ByLayer	21.20° 119.80°	5/8" Rebar 5/8" Rebar Line Layer: Text Layer:	and the easterly line of Dearth with the center of Marshall Road and the northerly line of Dearth Deed Deed Text	

Save Traverse File can be used export an <u>Esri Traverse File</u> that can be imported in ArcGIS Pro. The entered Point of Beginning coordinates are used for the starting point ("SP") coordinate in the traverse file. It is recommended that you enter a Point of Beginning coordinate near the actual location of the parcel to minimize the distance the parcel needs moved after it is imported. You can also choose a starting point in ArcGIS Pro with "Set Start" prior to importing the traverse file and this will overwrite the starting point coordinates in the traverse file.

To use the <u>Traverse</u> tool search for 'traverse' in ArcGIS Pro and select the Traverse option.



The **Include Commencement Calls in Traverse Files** option will include the commencement calls in traverse file if commencement calls exist in the Call Table. For these to be imported into ArcGIS Pro properly, it appears that the layer must be set to a Line layer rather than a Polygon layer.

GIS Settings
Include Commencement Calls in Traverse Files

To import the Traverse File click = button and choose Import ArcMap Traverse File.

	Matt - Deed Reader	Pro MJ	? –			
< <	H → ft → Mode → Hz ► Elevation	Ground To Grid V Corrections	Manage Quality Data Reviewer	, ,		
Modify Features ? ~ ₽ × € € Traverse						
Line	s Closure	Impo	rt	Ξ		Import ArcMap Traverse File
Layer Parcels - Parcels Import an ArcMap traverse file. → Export ArcMap Traverse File Force Close				Export ArcMap Traverse File Force Close		
1	Direction V Distance	Radius	Arc Lengt	h 🗸	Sen Sen	Auto Pan Options

When importing into a Polygon layer you will need to click the Finish button to complete the polygon. The insertion point can be changed with Set Start.

Mo	Modify Features ? ~ # ×						
\odot	(E) Inverse						
Line	Lines Closure						
Lave	Laver Parcels : Parcels						
+	📕 Set Start 🗙 Rei	move Closing	Trace	Lines			
	Direction 🗸	Distance	Radius	Arc Length 🗸			
1	N31°00'03"E	209.89					
2	N33°45'58"E	134.73					
3	N50°21'48"W	200					
4	N29°38'12"E	165					
5	N15°15'25"E cb		-400	253.12 с			
6	578°36'29"E	515.81					
7	S26°00'00"W	366.3					
8	50°00'00''W	210					
9	S45°00'00"E	156.2					
10	S84°58'57"W	635.12					
1	S84-58-57W QB 🗸						
Mie	<			>			
Misclose Distance: 0 ft Misclose Ratio: Exceeds 1:100.000							
Calculated Area: 345,031.02 sqFt							
Closure Method: Compass (default)							
Finish New							
Learr	Learn more about entering traverse dimensions						

Call Recognition Rules

In OCR and AI Transcribe Mode, Deed Text is processed by the rules described below. In OCR Mode the Deed Text or Call Table will often need to be corrected before all the calls can be fully recognized. The optical character recognition engine may not recognize all characters correctly and some characters may need to be manually corrected to be able to plot your deed. The deed may also not be formatted like these rules describe and you may need to make some minor modifications to it to be able to plot it. After reviewing these rules, study the Examples so that you can understand how to correct the Deed Text.

Deed Reader Pro - Call Recognition Rules with OCR or Al Transcribe Mode

- 1. The description should begin with "**Begin**", "**Beginning**" or "**Commencing**". Calls before these keywords will be treated as commencement calls and plotted as Tie Lines. These keywords and the other keywords discussed in this document can be either capital or lower case. If the text contains multiple instances of the beginning keywords, Deed Reader Pro will attempt determine the true point of beginning.
- 2. Deed Reader Pro will use the following keywords to locate the end of a description: "contains", "termination", "bearings based", "bearings are based", "beginning." Some examples include:

"to the place of beginning containing 2.5 acres." "to the point of termination." "bears are based on the north line of Fred Smith." "to the point of beginning."

If the deed does not end with one of these keywords the deed may not process correctly and you should manually type in one of these keywords at the end of the description to resolve this issue.

- 3. The keyword "thence" is used to signal the start of a bearing and distance call. For each occurrence of "thence" a bearing and distance call will be expected and a new line will be created in the call table. If a properly formatted bearing and distance call are not found before the next occurrence of "thence" the created line in the call table will be left blank or with missing data that was not found. When this occurs, the Status will indicate "Data in the call table is missing". When data is missing or incorrect you must correct the Deed Text and then press Process Deed Text to process the text again and update the Call Table, you can also correct the deed by directly editing the Call Table. Cells in the call table that are missing data that is required to plot the deed are highlighted red.
- 4. When the keywords "**courses**", "**lines**" or "**calls**" are found as often occurs in descriptions before a list of courses. This list will end at the next occurrence of "**thence**". Consider this example:

thence along Bob Smith's east line the following 3 courses: N 15°16'30" W to an iron pin, N 6°2'46" E to a stone, N 21°9'6" W to an iron pin,

All 3 of these calls will be recognized even through the last two don't begin with "thence" since the keyword "courses" preceded them.

5. For each call, Deed Reader Pro searches for a bearing followed by a distance and then a monument. Deed Reader Pro can recognize bearings in many format.

Some examples of valid formats for bearings that will be recognized include:

North 15°20'35" West N 15 20 35 W N15-20-35W N-15-20-35-W N 15:20:35 W N. 15D 20M 35S W. N 15 W N 15.3431° W

Deflection angles and interior angles are supported. Defection angles are read by the keywords "deflecting right" or "deflecting left". Interior angles are read by the keywords "interior angle". Interior angles are treated as angle left calls so that the deed calls progress in a clockwise direction around the parcel.

6. Distances can be in units of feet, yards, meters, chains, poles (or rods), links and vara. The combination of multiple units of chains, poles and links (e.g. 5 chains 3 poles and 1 link) is supported. All distances will be presented in the Call Table in the units that are provided in the

Deed Text. When the deed is plotted, all units will be converted to feet or meters (as configured in the Configuration options).

- 7. Descriptions of monuments must be proceeded by "to". The description includes all text after "to" until one of the following keywords is found: point, pin, stone, pipe, nail, axle, post, spike, monument, stake, rod, iron, road, tree, rebar, I.P., IP and corner. If none of these keywords are found the description will include all text between "to" and the next occurrence of "thence". The description for the beginning point at the beginning of the deed is used for the last point description. The keywords "Beginning at" are used to identify it.
- 8. Deed Reader Pro will plot monuments that are passed for each call when the keyword "**passing**" is found. The passed monument can be called before, between or after the bearing and distance. Deed Reader Pro supports reading and plotting multiple passing monuments for each call. Some examples of supported calls with monuments being passed include:

thence with the south line of Smith passing an iron pin at 15.00' and a stone at 45.23' S8°21'36"W 98.23' to a stone; thence with the south line of Smith S8°21'36"W passing an iron pin at 15.00' 98.23' to a stone; thence with the south line of Smith S8°21'36"W 98.23' passing at 15.00' an iron pin to a stone;

- 9. Adjoiner descriptions are read and displayed in the Call Table if the option for them is enabled in the Configuration settings. The keywords "**with**" and "**along**" are used to determine where the adjoiner description starts. Adjoiners are plotted in CAD if enabled.
- 10. Deed Reader Pro will read curve data so that curves can be calculated and plotted. The curve direction, curve radius, chord length, chord bearing and distance are read from the deed. With this information the curve is calculated and plotted. Curve calculations are explained in detail in the <u>Curves</u> section of this manual.

Purchasing an Activation Key

If you decide to purchase an Activation Key, this can be done by opening the **Purchase License** window. To get to the Pruchse Llicense window, click the Info ibutton and select **Purchase License**.

Purchase	×				
Prici	ng Plans				
Monthly	Yearly				
\$25	\$18				
per month when billed monthly	per month when billed annually at \$216				
Purchase Monthy Subscription	Purchase Yearly Subscription				
Both plans include 4,000,000 tokens a month for AI usage and unused tokens are accumulated and rolled over each month. AI tokens are the basic units of text that AI language models use to process information. A typical deed with 20 calls uses about 10,000 tokens to transcribe and parse or only 2,300 tokens to transcribe. With 4,000,000 tokens, approximately 400 deeds can be processed.					
Additional tokens can be purchased at a rate of \$10 for 5,000,000 tokens. Purchase Additional Tokens					
Subscriptions can by canceled or your payment metho Billing	od can be changed by clicking Info > Manage Account and				
If you need help modifing, canceling or transferring a	subscriptions to a different machine contact:				

support@deedreaderpro.com

Choose the plan you desire and you will be directed to a Stripe payment link. Your license will be activated shortly after the payment is processed.

If you need change the card associated with your account or cancel your subscription use to link: <u>Stripe</u> <u>Account Management</u>. This link can also be opened from Info > Manage Account and Billing. If you need additional help email <u>support@deedreaderpro.com</u>.