

A BASIC GUIDE:

from pencil scans to
digitally inked drawings



SPRING 2024

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FOREWORD

This guide will cover the basics of Adobe Illustrator for digital tracing. As always, there are many ways to do the same things. This here is how I optimized the process for myself over the years apprenticing for Dr. Shelton. I don't go into much detail, but Google is your friend. Hopefully you will find something that will work for you too!

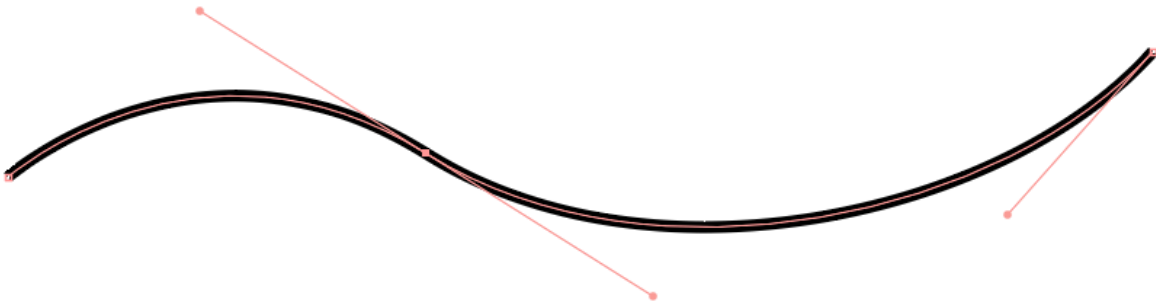
*Best,
Michelle*

COMMON TOOLS

Get familiar with the following tools. They will make up the majority of your time in Illustrator.

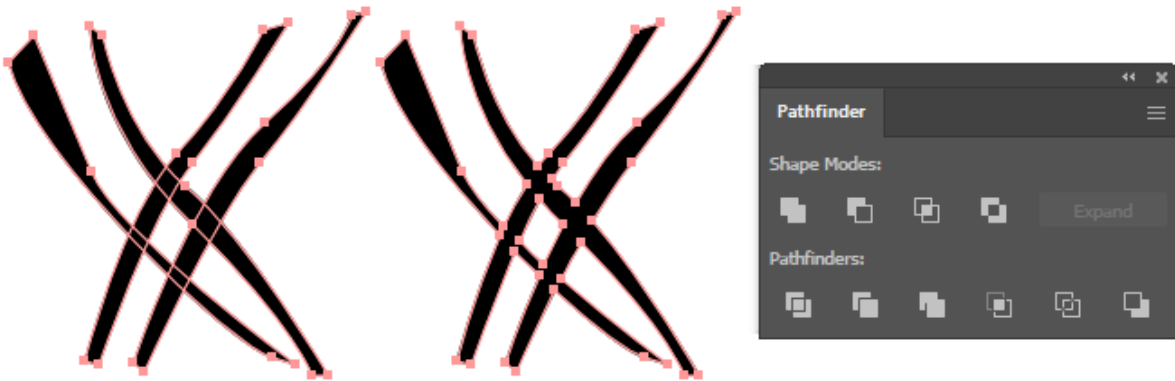
Pen Tool

The most basic tool. It is a bit tricky to get the hang of, but after a while you will get used to it. Lines are adjustable with the Direct Selection Tool (shortcut A). Try to make closed paths, it will help eliminate issues with fill and stroke weight (and make it easier to use the Pathfinder Tool!).



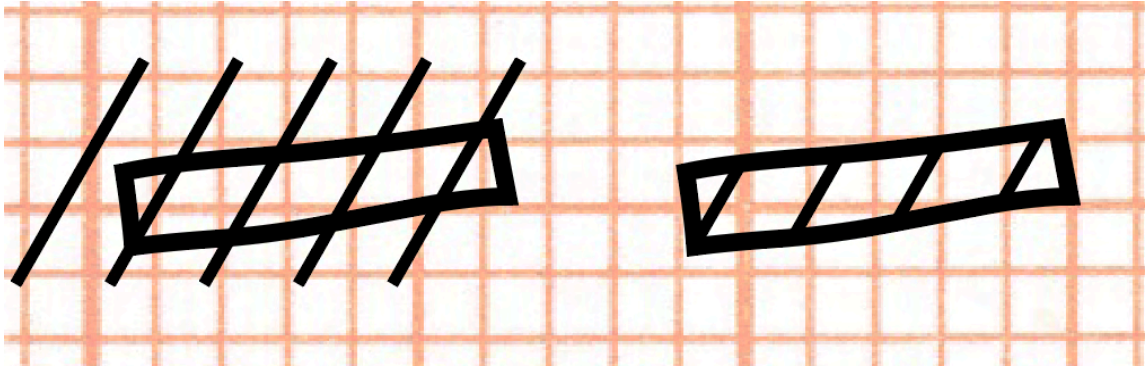
Pathfinder

The Add/Subtract/Divide tool. Merge shapes, cut them out of each other, or cut them apart with divide. Very useful breaking down more complicated shapes into more manageable parts.



Clipping Mask

The "only show what's inside the shape" tool. Helpful for special fills (e.g. Hashed/Dots). Illustrator will automatically make the stroke invisible, but the black line can be restored (Direct Selection -> Eyedropper Tool/use Properties panel).



Other Tools/Actions

- Eyedropper Tool (select Color/Pattern)
- Selection Tool (select entire path, instead of one point like Direct Selection Tool)
- Cutting Tool (cuts paths, shortcut C)
- Join (ctrl+J, join paths)
- Artboard Tool (resize artboard)
- Hand Tool (drag around artboard)
- Rotate Tool (rotate selected object around a clicked point)
- Make Compound Path (links shapes together)
- Group
- Undo (ctrl-Z)
- Save (ctrl-S)

COMMON PATTERNS

Solid Line

Denotation of an actual edge of the original finding.

Dashed Line

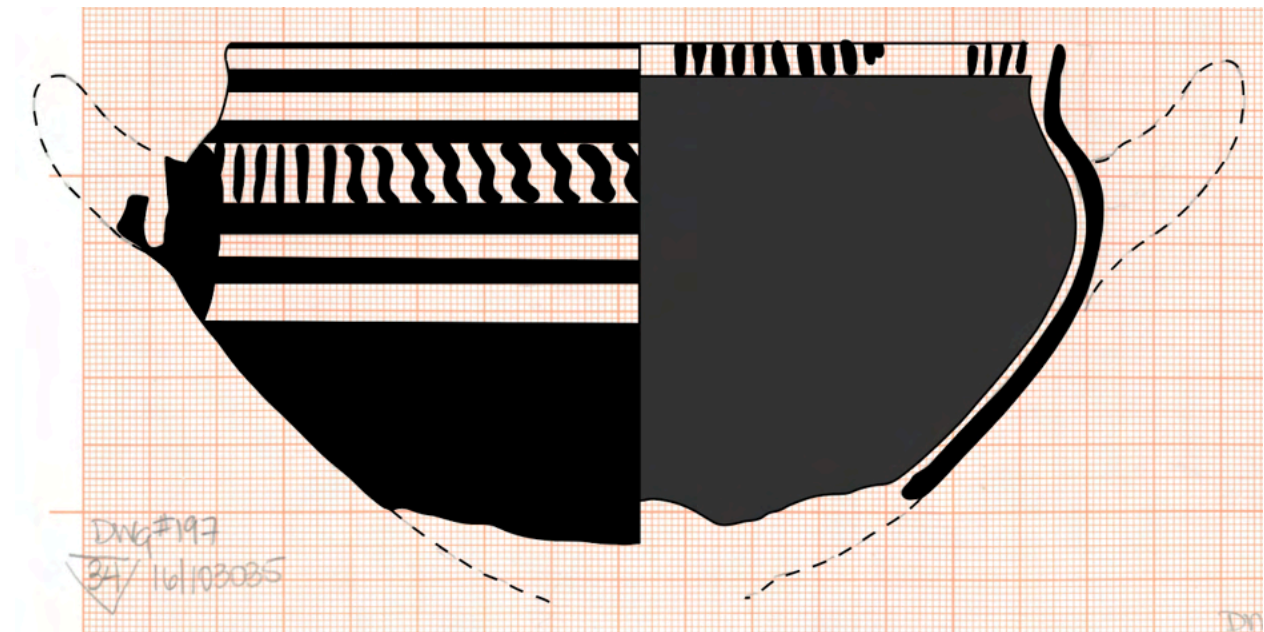
Shows the missing edge of the find, either recorded through its impression or inferred.

Black Fill

Represents the painted decoration on the outside of the find, as well as the cross-section cuts (thicknesses) of the pieces.

Gray Fill

Denotes that the inside has been painted. It is dark gray in order to differentiate from the Black Fill of outside decorations and cross-sections.



solid line, dashed line, black fill (decoration), black fill (crosscut), gray fill

Hashed Fill

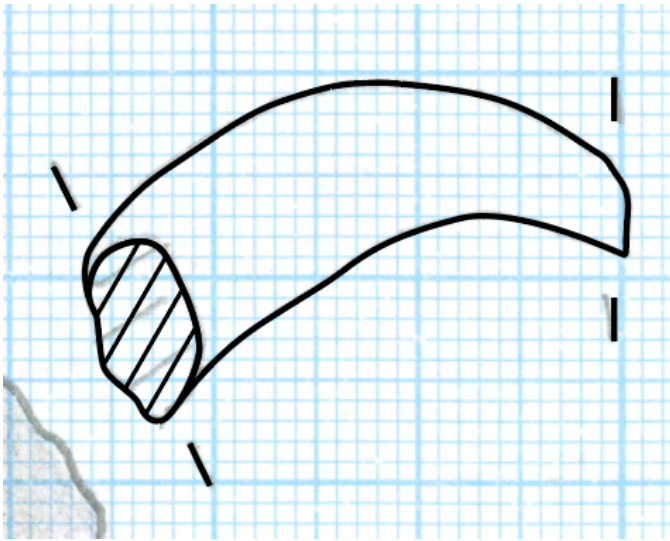
Used to indicate a sheared edge and/or a different color.

Randomized Dots

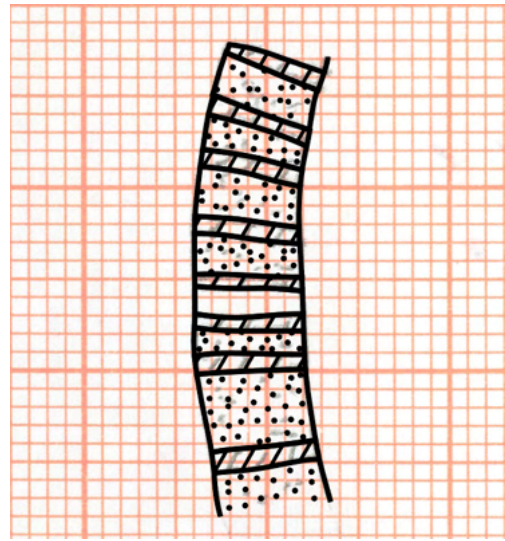
Mainly for denoting cosmetic differences (e.g. white paint, stippling, etc....)

Text Labels

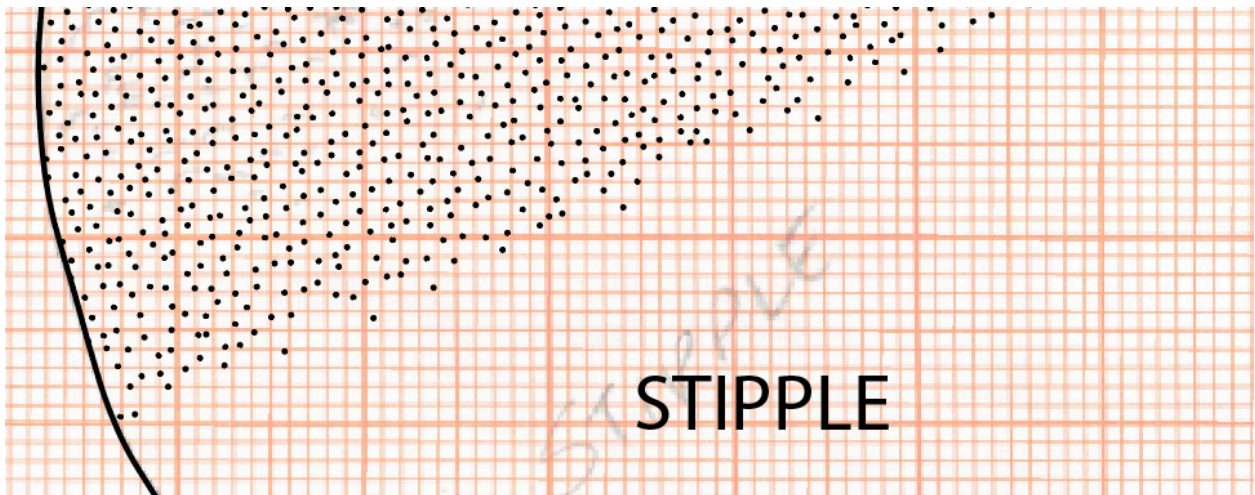
Sometimes there will be some text labels. Just type out the text sized to the original image size. Font doesn't really matter, I usually leave it as native Myriad Pro.



hashed fill (shear), solid line



hashed fill (decoration), randomized dots



randomized dots, text label

STANDARD FILE SETUP

Image Setup (open, straighten, opacity & lock)

Open Image, Change Image Opacity

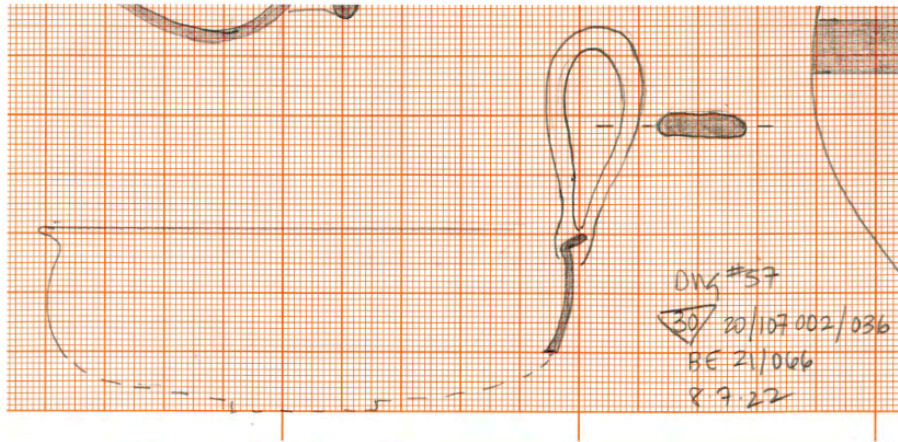
Open the image directly into Adobe Illustrator. Sometimes the Artboard will load in smaller than the image. Resize the Artboard if so.

Straighten the Image

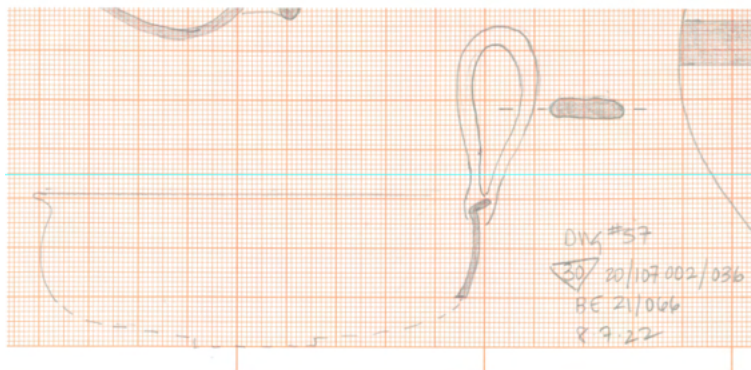
Drag down a horizontal guide from the ruler (or View -> Add Guide), and use the Rotate Tool to align the image's grid to it. Delete the guide afterwards.

Lock the Layer

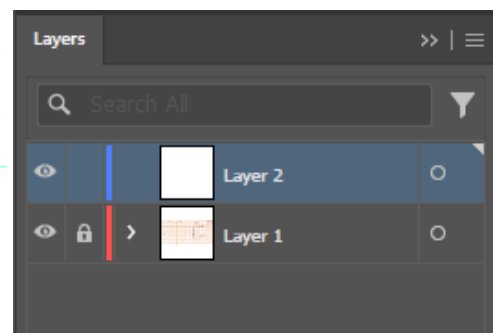
Select the image and turn it's opacity down to 50% (Properties Panel). Open the Layer Panel and lock Layer 1. Create a new layer.



open image in Illustrator



add guide, straighten image



lock image layer, create new layer

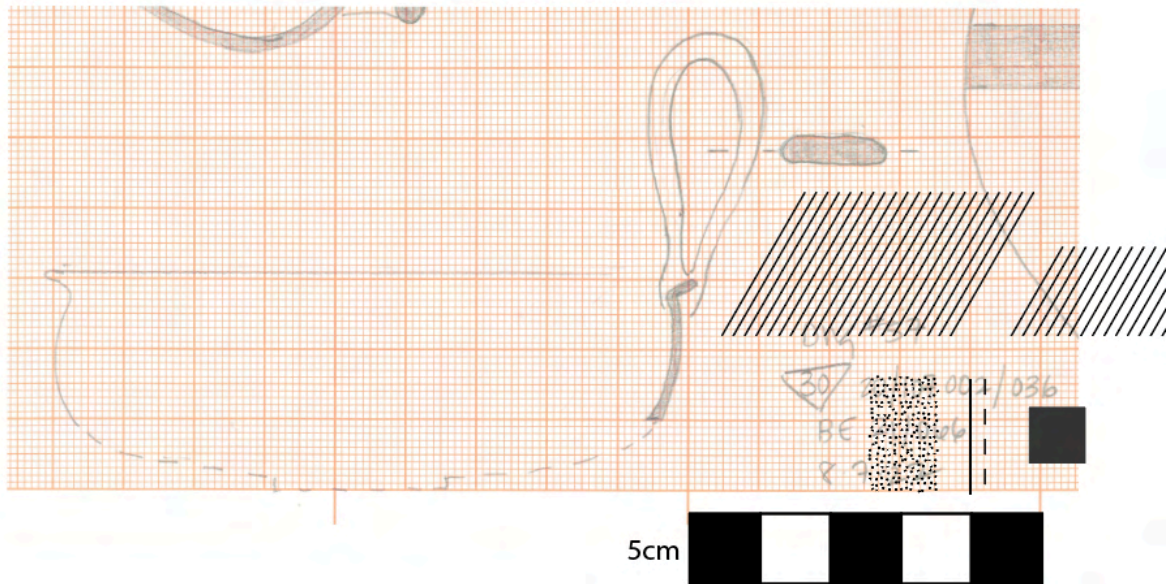
Import Assets (new layer, copy & paste)

Open Assets.ai

Copy the assets over into Layer 2, and move it off to the side. Delete what you don't need.

Move the Scale Ruler

The Scale Ruler needs to be somewhere around the bottom of the image. It should automatically be the size of the grid, but double-check and adjust accordingly.



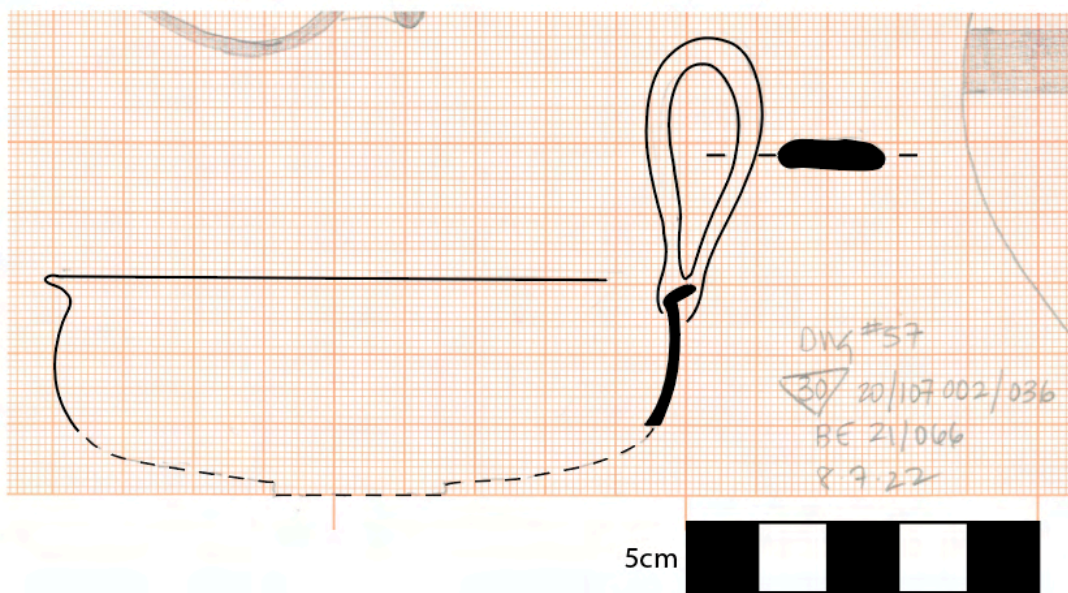
prepared file with assets copied in, scale ruler positioned

Start Tracing

Eyedropper Tool whichever line you need. Dotted line adjustable through Properties -> Stroke menu.

The Hashed Fill is made with a Blend function, meaning you can just stretch it to fit the space, just keep the endpoints on the same level. Use a Clipping Mask to clip to a specific shape.

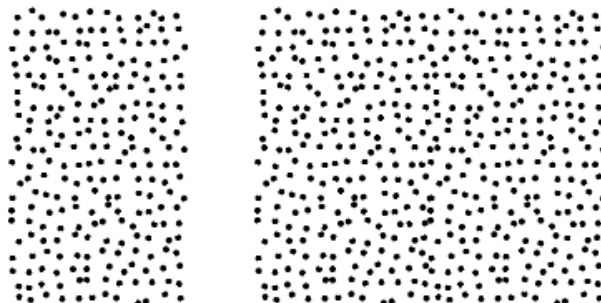
For Randomized Dots, I just copy together the grids until there is enough coverage. Group together and use a Clipping Mask.



finished tracing



*Blend function on Hashed Fill
keep parallel to keep spacing*



copy/pasted Randomized Dot Fill