

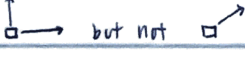


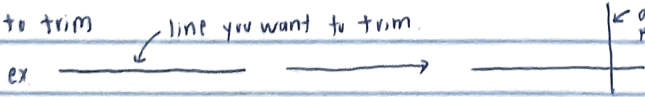
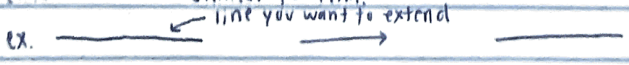


## AutoCAD CIVIL 3D HOW-TO NOTES

### 1. HOW TO RELINK AN IMAGE OR XREF:

- type xref → press image or xref → press path under the list of xrefs
- click on the  symbol
- find the image or xref in the place that you want it to be.  
ex the current xref/image is in the P-drive, but you want to relink it into the T-drive

### 2. Basic commands:

- F3 → snap → so you can get lines to snap together.  SNAP = GREEN SQUARE
- F8 → makes you move item perfectly straight up or to the side.  
ex.  but not  depends on the UCS. The item will move with the coordinate system (found/created by the UCS)
- copying an object → "co" or just type copy, click on desired object that you want to open → enter → select a desired base point. then drag to where you want the copied object.
- moving an object → "m" or just type move, similar to copy.  
using snap helps with moving or copying the object to an exact spot.
- erase → type "E" → select object → enter  or press this icon
- undo → "u" → enter to undo your last moves.
- line → "L" to draw a line, can use F3 & F8 to make parallel lines & exact ends
- polyline → "pl" to make a continuous line that connects.
- trim → want to cut a line? trim it. type "trim" → click objects you want to trim  
ex.  line you want to trim. draw new line to the place you want to trim  
type trim, select objects, hover over area you want to trim, click, enter.
- extend → "ex" similar to trim.  
ex.  line you want to extend. draw new line to place you want to extend to.  
type extend, select objects (but the lines), hover over side of line you want to extend

K. COPYBASE → type copybase → so you can copy an object from one sheet/viewport to another. CAN use snap (FS) to get object to be in exact space that you want. EX 0,0,0 OR TYPE YOUR OWN COORDINATES.

L. ROTATE → "ro" → select image OR object, select a base point (the point that you want to keep/stay put) → type "r" to get the option of having a reference point. click the same stagnant point again. Click the point that you want to move, then click in the area that you want this point to be.

M. SCALE → "sc" → same as rotate.

N. PROPERTIES → CTRL 1 OR TYPE "PR" OR right click on object.

you can adjust color → typically the color is "by layer", layer, linetype, etc...

O. PAPER SPACE → type "ps" to go back from model space to paper space or look at bottom tab in left corner. model space is typically shown to scale in a viewport in paper space.


P. REVISION CLOUDS → "REVCLLOUD" → polyline → arclength → typically .25 can use rectangular to make a rectangular revcloud, polygonal to make a revcloud with your dimensions. DRAW a polyline in your desired revcloud shape & use object → etc...

Q. PREVIOUS OBJECT/POINT → "P" you can use "P" to reselect your previous objects or points.

EX. you move a bunch of lines onto another bunch of lines but you want to only want to rotate the bunch of lines you moved and not all the garbage under it, so, → RO → P ← to select all the lines you moved.

R. OFFSET → "o" you can copy a line to exactly " " distance away from it.

EX. O → select object → enter → type 7 for 7 feet or inches away → hover over the object you want to offset and hover over the side / area that you want your new copied object.

EX.  ← the new offset line 7 feet away.

s. Fillet → "F" → allows you to round off polylines or it allows you to create an arc between two lines w/ your desired radius. When CAD asks for radius, add radius that you want.

t. JOIN → "j" you can join two lines together and make it a polyline.

u. Break → "BR" to break a polyline or arc into two or more pieces.

Click on object and snap to where you want to break it. (p.s. it will break where you select the object, but it's okay, just snap and re-lengthen your line.

v. Lengthen → "LEN" → select object that you want to change the length of. ENTER.

type in the specific length you want → enter → hover over the object again. length should change on the side you hover over.

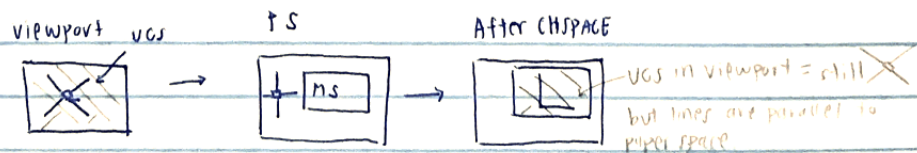
w. Circle → "C" → just click where you want the radius to begin (where you want the center) and move your mouse to where you want the radius to end. OR. You can type the length of the radius that you want.

x. Arc → "ARC" → you can pick the center of the arc that you want "C" or you can pick the start and endpoint of the arc. TRIM if you need to.

y. Distance → "dist" → you can find the distance between two points, along w/ the x-y-z coordinates.

z. changespace → "CHSPACE" → if you want to bring an object from paperspace into model space. OR VICE VERSA. USEFUL WHEN ADJUSTING STATIONING

EX. helps when UCS in viewport doesn't align w/ paperspace. Must select viewport.



DUMB BONUS: ESCAPE → "ESC" LOL you can escape from the command you are using.

THERE ARE MANY OTHER COMMANDS, BUT THEY WILL CONTINUE RANDOMLY AFTER THESE PAGES.

### 3. HATCHING:

How to hatch an object → draw an enclosed boundary. MAKE SURE IT'S CLOSED.

Go to properties and make sure under MISC → CLOSED → YES.

a. type hatch → object → press the boundary you want.

b. You could pick your own hatch, scale it down to your liking, make it denser  
change its angles. OR you can just match the hatch to an already existing hatch.

c. you can also use the origin option in the RIBBON to center your hatch.