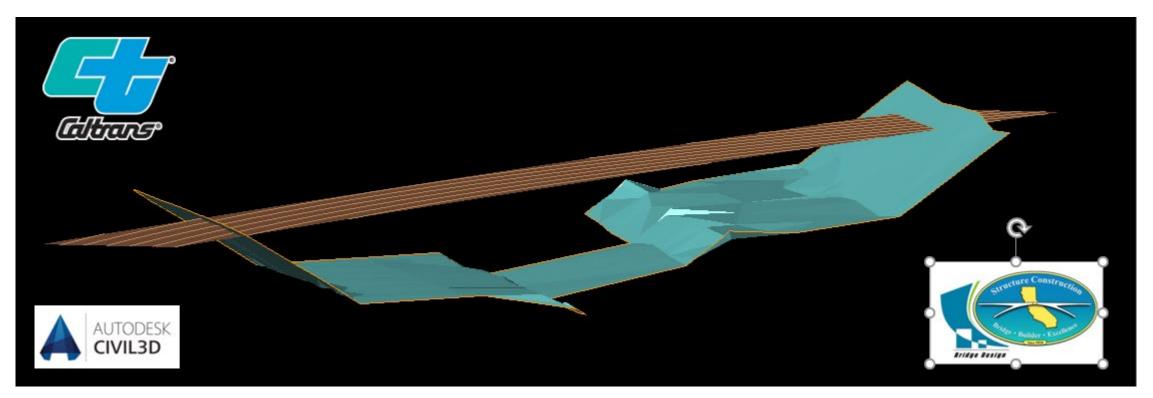
Civil 3D Create Deck Elevation Points



October 2020 by Jessica Waller

How to get Grades from a Deck Surface

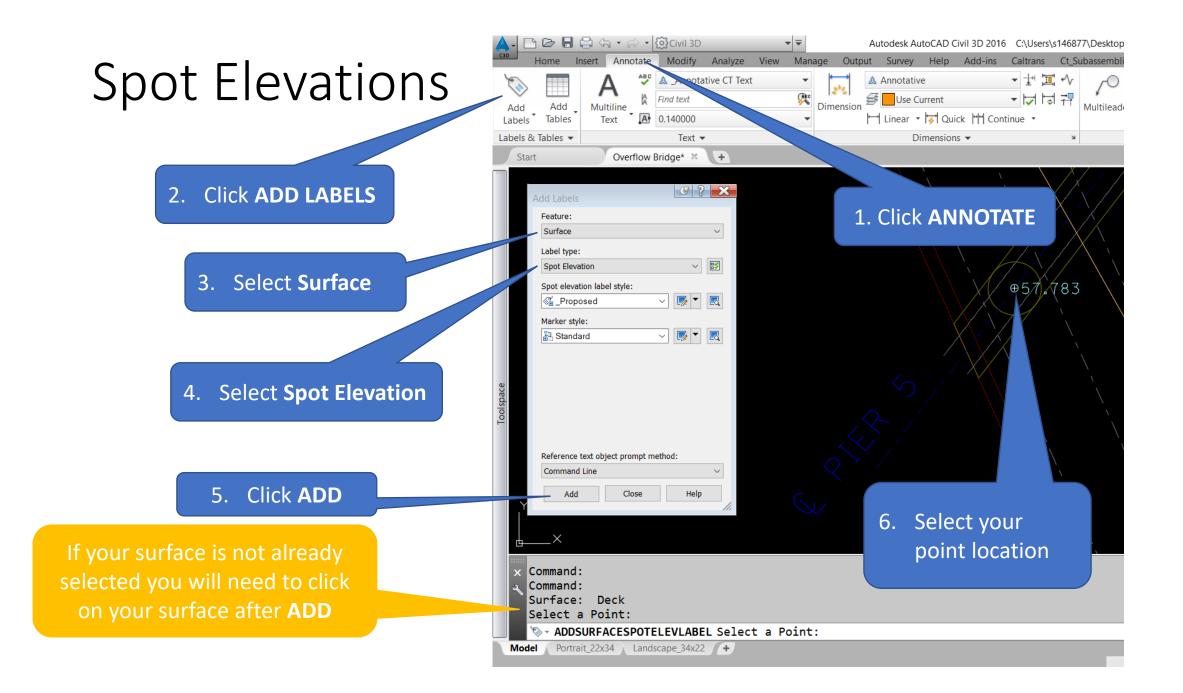
- 1. What Files You Need
- 2. How to Create Spot Elevation
- 3. Create Multiple Elevation Points to Export
- 4. Exporting Points to Excel
- 5. Delete Multiple Points

What Files You Need

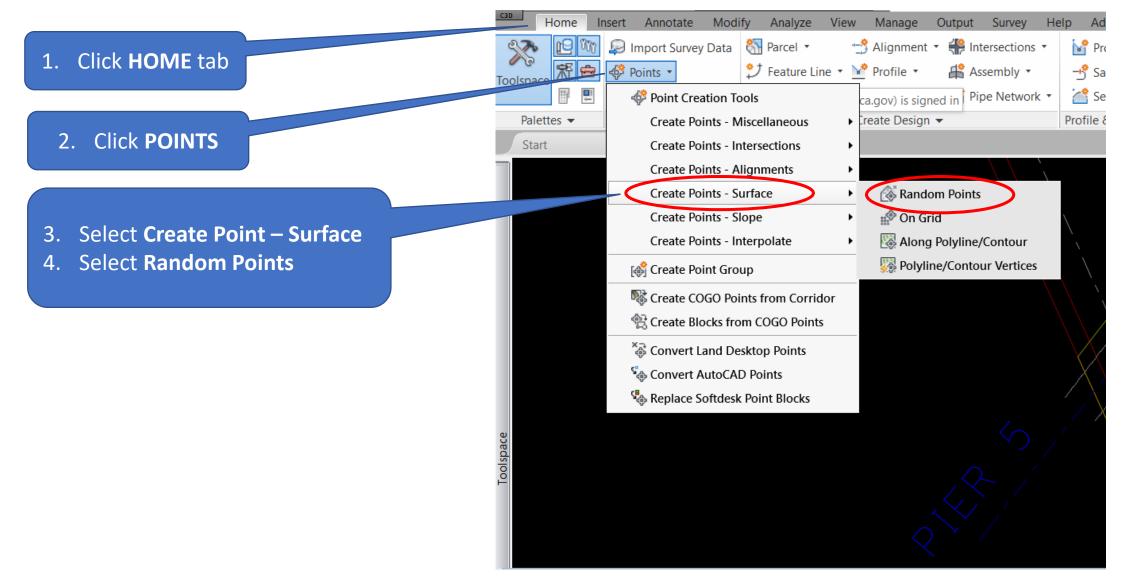
- 1. The Bridge Alignment .xml file
- 2. The Bridge Deck Surface .xml file
- 3. A .dwg file of the 2D Bridge Layout in Real World Coordinates, (including but limited to):
 - Abutment layout
 - Abutment centerlines
 - Bent/Pier layout
 - Bent/pier centerlines
 - Column layout
 - Girder centerlines

- Edge of Deck
- BB & EB
- Wingwalls
- Bearing locations

Consult your Structures Designer for assistance in obtaining these files and combining them into a single .dwg file for you to use.



Creating Multiple Spot Elevations for Export



- Expand <u>Point Creation</u> and change the "Prompt For Point Name" to read "NONE"
- 6. Expand <u>Point Identity</u> and change the "Next Point Number"
- 7. Begin laying out your points

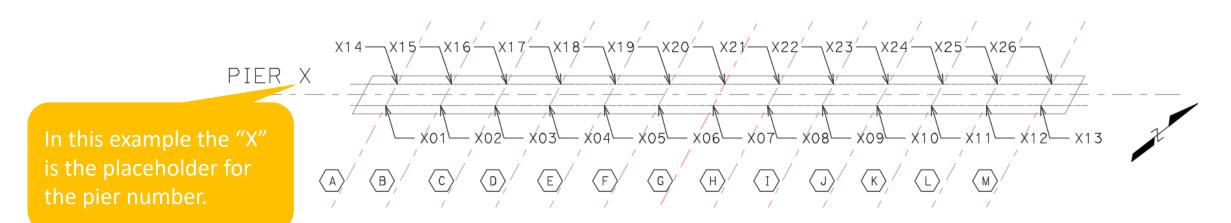
You may need to select your surface if its not already selected for you.

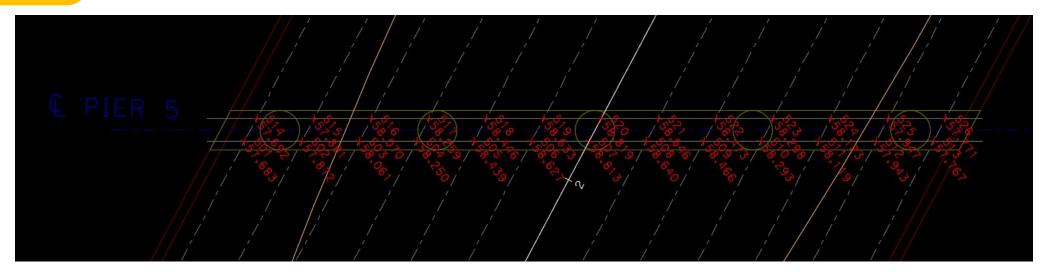
If you select the wrong location by accident, **DELETE** the point. <u>**DO NOT**</u> move the point, the elevation will be wrong.

/		IIIII 🥐 🖓 🏣 🛛 🖓 🖓 🛄 👘 Diait
	Create Dointe	9 ? 🔀
	Create Points	
	_+\$ ▼ ↓\$ ▼ ∫\$ ▼	`% ▼ ∰ ▼ [®]
	Parameter	Value
	🗄 🖾 Default Layer	
	E Points Creation	
	Local Coordinates	Northing - Easting
	Grid Coordinates	Grid Northing - Grid Easting
	Geographic Coordinates	Latitude - Longitude
	Prompt For Elevations	Manual
	Prompt For Point Names	None
	Prompt For Descriptions	None
	Default Elevation	0.00'
	Default Description	
	Match On Description Paramet	eter True
	Disable Description Keys	False
	Echo Coordinates to Comman	id Li True
	⊕ Default Styles ■	
	E Default Name Format	
	B Point Identity	
	Next Point Number	501
	Use Sequential Numbering	True
	Point Number Offset	1
	Sequence Point Numbers From	
	If Point Numbers Are Supplied	
	Force Names	False
	If Point Numbers Already Exist	
	If Point Names Already Exist	Notify
	If Point Numbers Need To Be	As Use next point number

Command: Random Points

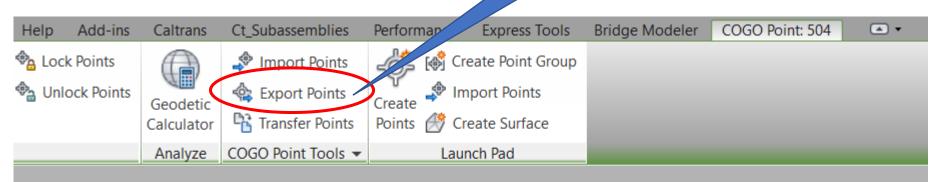
Point Layout Example – (precast girder bearing seat)





Exporting Points to Excel

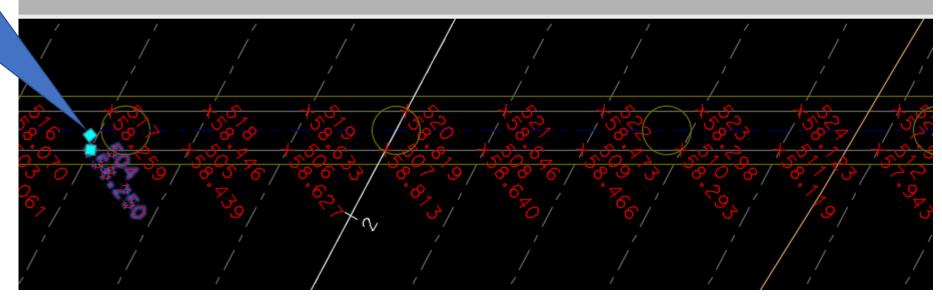
 Select one of your points.
COGO POINTS will automatically popup



Click **EXPORT**

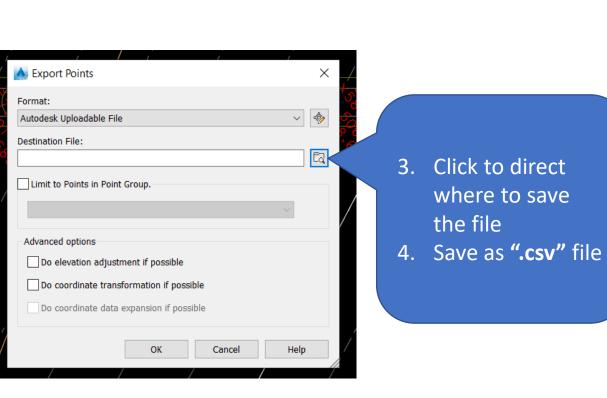
POINTS

2.



Exporting Points to Excel

The .csv file will automatically export as: **Point # / Northing / Easting / Elevation**



	A	В	С	D	E		
1	501	1890692	6750793	7 6834			
2	502	1890700	6750799	57.		(
3	503	1890708	6750805	58.06		5.	Delete the
4	504	1890716	6750812	58.2502		Э.	
5	505	1890724	6750818	58.4391			Nothing &
6	506	1890732	6750824	58.6266			
7	507	1890740	6750830	58.8131			Easting
8	508	1890748	6750836	58.6397			columns
9	509	1890756	6750843	58.4663			
10	510	1890764	6750849	58.2929		6.	Save file as
11	511	1890772	6750855	58.1185			
12	512	1890780	6750861	57.9428			".xlsx"
13	513	1890788	6750868	57.767			
14	514	1890696	6750791	57.6918			
15	515	1890704	6750797	57.8808			
16	516	1890712	6750803	58.0697			
17	517	1890720	6750810	58.2586			
18	518	1890728	6750816	58.4462			
19	519	1890736	6750822	58.6328			
20	520	1890744	6750828	58.8194			
21	521	1890752	6750835	58.6459			
22	522	1890760	6750841	58.4725			
23	523	1890768	6750847	58.2983			
24	524	1890776	6750853	58.1226			
25	525	1890784	6750859	57.9468			
26	526	1890793	6750866	57.7711			
27							
28							

Delete Multiple Points



a command

22x34 Landscape_34x22 +

/		
I	Repeat CREATEPOINTRANDOMPOINTS	
I	Recent Input	
	Isolate Objects	
(Clipboard •	
ł	Basic Modify Tools	
[Display Order	
	Properties	
-¢ % (Quick Select	
I	Point Group Properties	
I	Edit Points	
I	Lock Points	
ļ	Unlock Points	
ł	Renumber	
[Datum	
I	Elevations from Surface	
ł	Edit Label Text	
(Clear Label Text Override	
F	Reset Label	
	Foggle Label Pin	
Ad	ld Selected	
Ob	oject Viewer	

0

Select Similar

If you need to **START OVER** over a quick way to delete all the points at once.

1. Select a point

- 2. **Right** click, select "Select Similar"
- 3. Hit the **DELETE** key